

A Business Model Development Strategy to expand into the Bottom of the Pyramid population

by

Tanye ver Loren van Themaat



*Thesis presented in partial fulfilment of the requirements for the degree
of Masters of Engineering Management at the University of Stellenbosch*



Supervisor: Prof. CSL Schutte

March 2011

I. Declaration

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II. Abstract

The Bottom of the Pyramid (BoP) population are those individuals who live under the poverty line. They often do not have easy access to products and services, because the infrastructure to serve them is not in place and most organisations consider the challenges of the BoP overwhelming and unconquerable.

The primary objective of this research is to develop a framework that guides an organisation through the design of a business model, which will allow them to expand into the BoP population

Organisations face constant pressure to increase their market share and profits, and improve their performance in the current aggressive environment. To retain their competitiveness they have to look at unconventional and alternative markets.

By recognising the BoP as a potential emerging market, organisations can increase their market share or enter new markets, thereby creating benefits for organisations and the BoP alike.

The reasons why organisations fail when targeting the BoP market are also identified in this research. These reasons include aspects like organisations making assumptions about the BoP, not understanding the BoP, not knowing how to approach the BoP market and being ignorant in designing a business model tailored for the BoP market.

This research addresses the difficulties organisations face when they want to target the BoP by developing a framework that allows an organisation to successfully target the BoP population. This framework also fulfils the secondary objective of this research, which is to adhere to the three goals of Sustainable Development:

- Fair treatment of all people: Giving all people, regardless of their level in the economic pyramid, equal access to products and services. This is the foundation for social equity. Including the BoP in economic activity by overcoming the constraints the BoP face;
- To not degrade the environment through sustainable design;
- Economic growth and development to ensure the organisation makes a profit.

Four primary research fields – Sustainable Development, Bottom of the Pyramid literature, Business Models and Blue Ocean Strategy – were investigated and then aspects of these fields were merged to form the Business Model Development Strategy. This framework offers a systematic approach for organisations to first analyse and understand all aspects of the BoP and their environment, and then develop a business model that fulfils the core requirements of the BoP.

It was found that if organisations want to successfully target the BoP, they have to fulfil the 4 A's – Acceptability, Awareness, Availability and Affordability – which are the core needs and requirements of the BoP.

Using the Business Model Development Strategy as guideline, organisations can design a business model that minimises the risk of failure when they target the BoP, while maintaining the principles of Sustainable Development.

III. Opsomming

Die term *Bottom of the Pyramid (BoP)* verwys na diegene in die bevolking wie 'n bestaan voer onder die armoedelyn. Vanweë die feitdat die nodige infrastruktuur nie aan hul behoeftes voldoen nie, en ook dat meeste organisasies hul uitdagings as oorweldigend en selfs onoorkombaar beskou, het die BoP bevolkingdikwelsnietoegang tot sekeredienste en produksie,

Die primêre doel van hierdie navorsingstuk is om 'n raamwerkte skep wat organisasies deur 'n unieke ontwerp van 'n besigheids model sal lei. Hierdie model sal organisasies in staat stel om hul dienste uit te brei en sodoende ook die BoP bevolking te bereik.

Organisasies ervaar gedurig druk om hul markaan deel en wins te vergroot en omtrefloreer in onstuimige ekonomiese klimaat. Om hul mededingendheid te verseker, moet organisasies hul blik werp na ongewone en alternatiewe markte.

Deur die BoP as 'n potensiële ontluikende mark te erken, kan organisasies hul marktaandeel vergroot, of selfs nuwe markte betree en in die proses voordele skep vir organisasies sowel as die BoP.

Hierdie navorsingstuk sal ook die redes ondersoek waarom organisasies suksesvol is wanneer hulle die BoP mark betree; hierdie redes sluit in, ondermeer, dat organisasies aannames maak oor die BoP, hierdie mark glad nie verstaan nie, onbekwaam is wanneer hulle die BoP mark betree en nie weet hoe om 'n besigheidsmodel te ontwerp spesifiek vir die BoP mark nie.

Die navorsing vervat in hierdie tesis oorbrug die struikel bloke wat organisasies in die gesig staar wanneer hulle die BoP mark wil betree, deur die ontwerp van 'n raamwerk wat sulke organisasies in staat stel om die BoP bevolking suksesvol te betree. Hierdie raamwerk voldoen ook aan die sekondêre doel van hierdie navorsingstuk, om die drie uitgangspunte van Volhoubare Ontwikkeling te ondersteun:

- Die regverdige behandeling van alle mense: om aan alle mense, ongeag hul posisie binne die ekonomiese piramide, gelyke toegang te gee tot produkte en dienste. Hierdie is die beginsel van sosiale billikheid. Om verder die BoP in te sluit in ekonomiese aktiwiteite deur aan hul behoeftes te voorsien;
- Om, deur middel van volhoubare ontwerp, geen skade aan die natuurlike omgewing aan te bring nie;
- Om ekonomiese groei en ontwikkeling aan te moedig om te verseker dat die organisasie telkens 'n wins maak

Vier primêre navorsings gebiede – Volhoubare Ontwikkeling, 'Bottom of the Pyramid' literatuur, Besigheids modelle en 'Blue Ocean' Strategie – was ondersoek en bymekaar gebring om die *Business Model Development* Strategie te ontwikkel. Hierdie raamwerk bied 'n sistematiese benadering aan organisasies om, eerstens, alle aspekte van die BoP en hul omgewing te analiseer en te verstaan, en om vervolgens 'n besigheidsmodel te ontwikkel wat aan die kern vereistes van die BoP sal voldoen.

Daar is bevind dat, indien organisasies suksesvol die BoP wil betree, hulle aan vier kern vereistes moet voldoen – Aanvaarbaarheid, Bewustheid, Besikbaarheid en Bekostigbaarheid. Hierdie aspekte vorm die kern benodigdhede en vereistes van die BoP.

Deur die *Business Model Development* Strategie as riglyn te gebruik, kan organisasies 'n besigheidsmodel ontwerp wat die risiko van mislukking sal minimaliseer wanneer hulle die BoP mark betree, terwyl dit die beginsels van Volhoubare Ontwikkeling ten volle ondersteun.

IV. Acknowledgements

I started this research with the hope of doing some good in the world. I want to thank CK Prahalad, who unfortunately passed away earlier this year, for igniting my passion for the Bottom of the Pyramid population. He introduced them to me and showed me their worth and value. Other authors who inspired me were:

- Osterwalder and Pigneur: with their work on business models;
- Kim and Mauborgne: with the Blue Ocean Strategy.

Without their great work and contribution to literature, my research would not have been possible.

Then I want to thank the following people in my life for making this thesis possible:

- Corné Schutte: for his guidance, patience with my ever-changing ideas, and the freedom he gave me to pursue the topics that I love.
- My family and friends: Thank you for all your love, support and understanding. You kept me going through the difficult times, and made my breaks enjoyable and refreshing. Your love and encouragement means the world to me. Thank you for believing in me.
- My partners in crime at the Department of Industrial Engineering, who kept me motivated and laughing throughout the long evenings spent on this thesis. Thank you for sticking it out with me.
- Graham Lee for his input, time and advice while I was completing the Capitec case study.
- Van der Spuy Brink for his time and input in my life.
- Dr Erik Lutters for coming all the way from the Netherlands to be part of my expert analysis, and for all the great input and feedback he gave me.

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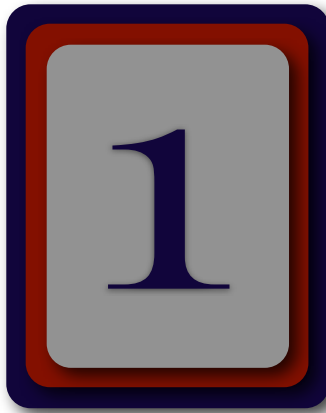
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IX. List of Acronyms and Abbreviations

BMDS	Business Model Development Strategy
BM	Business Model
BoP	Bottom of the Pyramid
BOS	Blue Ocean Strategy
PCM	Price Corridor of the Mass
TBL	Tripple Bottom Line



Introduction



“Poverty is much more than income alone. For the poor, the good life or wellbeing is multidimensional with both material and psychological dimensions. Wellbeing is peace of mind; it is good health; it is belonging to a community; it is safety; it is freedom of choice and action; it is a dependable livelihood and a steady source of income; it is food.” World Bank (Voices of the Poor)



1 Introduction

1.1 Research Opportunity

'The poverty of our century is unlike that of any other. It is not, as poverty was before, the result of natural scarcity, but of a set of priorities imposed upon the rest of the world by the rich. Consequently, the modern poor are not pitied...but written off as trash. The twentieth-century consumer economy has produced the first culture for which a beggar is a reminder of nothing.'

-John Berger

Poverty signifies a lack of material possessions. Individuals are considered poor when their income falls under the poverty line. The poverty line indicates the minimum amount a person needs to sustain a decent life. Prahalad has defined individuals living below the poverty line as the **Bottom of the Pyramid (BoP)** population (1). More than two-thirds of the world's population fall in this category. Figure 1 shows the world's income distribution.

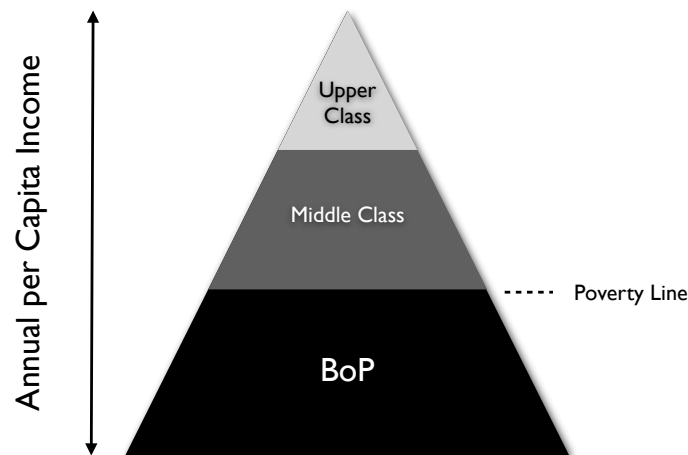


Figure 1: The World Economic Pyramid (1)

Creating purchasing power and making products and services available to the BoP, at an affordable price and in an acceptable form, are two ways of bringing people out of poverty. CK Prahalad believes that the BoP can be a consumer market if a capacity to consume is created (1). The BoP can become a very viable market, provided that organisations understand the nature of their requirements.

Organisations need to grow. They grow by increasing their market share and capturing new markets. Shareholders and investors pressure organisations to grow because they want the value of their investment to increase. Growth creates opportunities and improves the well-being of an organisation by creating wealth and jobs. Another reason why growth is important is to ensure that competitors don't surpass an organisation with a better performance offering and draw away their customers.

'You will either step forward into growth or you will step back into safety.'

-Abraham Maslow



1.1.1 Background

An opportunity can exist for organisations when they consider the BoP to be a viable market. The BoP often lacks access to many products and services that would improve their well-being and give them access to all the basic necessities. The BoP faces innumerable constraints on a daily basis. Most organisations are not strategically and physically placed to pierce this market or they fail to recognise these customers as a valuable market, because of their small spending power, lack of education, and lack of access and proximity. Organisations often don't consider the BoP to be a viable market, but the combined resources of these potential customers present the possibility of forming a market that needs to be taken seriously.

Organisations try to use their established business models, designed for the high-end market, to expand into the BoP, but often they don't recognise that the two markets are completely different and need different cost structures and approaches to be successful.

The BoP and organisations have a **reciprocal need**: the BoP needs access to products and services that are tailored to its particular needs, and organisations need to increase their market share and profits by entering new, uncontested markets.

The Centre for Science and Environment, based in Delhi, draws attention to the fact that if all the poor people in the world consumed the same amount of resources as the West, "*we would need two additional planet Earths to produce resources and absorb wastes ... and good planets are hard to find!*" (2) This basically means that if economic growth increases to such an extent, our planet will not be able to handle the 'wants' of the people. Economic growth and poverty alleviation can have a negative impact on the environment through overuse and waste disposal, because when more products and services are used, more resources are used, creating more pollution and waste.

Daly (3) states two principles that need to be applied in order to uphold sustainable development in the environment:

- Harvest rates should equal regeneration rates.
- Waste emission rates should equal the natural assimilative capacities of the ecosystems into which the wastes are emitted.

This means that the pollution and consumption of the environmental resources must be kept at a sustainable level.

Prahalad states that if organisations want to target the BoP, a Commercial Infrastructure must be developed that is specifically tailored to the needs of the BoP (4). It consists of the four elements shown in Figure 2:

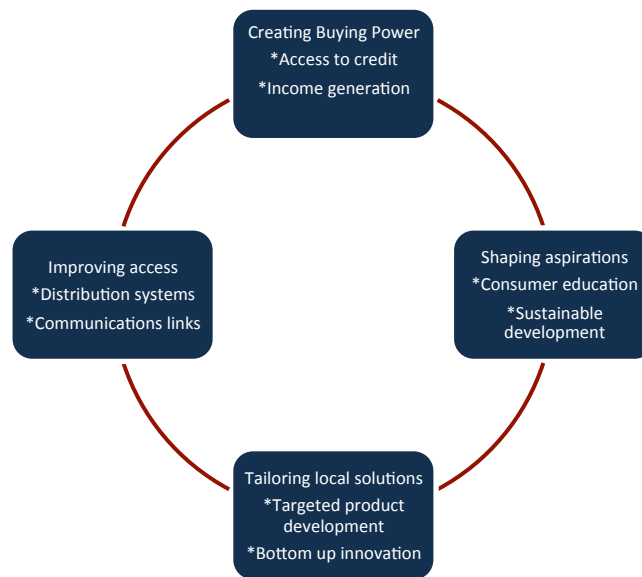


Figure 2: Commercial infrastructure for the BoP (4)

The following Commercial Infrastructure elements are necessary to successfully target the BoP market:

1. Creating Buying Power
 - Generating more income through job creation, skills development, etc.
 - Making access to credit easier for the BoP, which allows them to start businesses and participate in economic activity
2. Shaping Aspirations
 - Teaching the BoP how to use products and services
 - Education and skills development
 - Generating awareness of Sustainable Development Principles. When economic growth occurs, the amount of pollution and waste that is generated increases
 - Creating environmentally friendly habits
3. Tailoring Local Solutions
 - Designing products and services specifically for BoP use
 - Simplifying products and services
 - Understanding the needs and requirements of the BoP market
4. Improving Access
 - Making sure products and services are available
 - Creating better communication channels

The first element examines increasing the buying power of the BoP, while the last three elements indicate how organisations must specifically design their business model to provide the BoP with products that are usable.



1.1.2 Research Gap

Currently there is a **problem** organisations face when targeting the BoP:

Organisations that are currently targeting high-end markets are struggling to successfully expand into the BoP market while simultaneously promoting social equity and environmental quality.

This thesis will investigate the reasons why organisations struggle to target the BoP, and develop an approach to overcome these problems.

The primary objective of this research is to design a framework that would guide an organisation through the process of designing a business model that allows them to expand into the BoP. **Raising the standard of living of the poor through business and not charity.**

The secondary objective is to ensure that the organisation adheres to the three main goals of sustainable development when targeting the BoP, which are:

- Fair treatment of all people: Giving all people, no matter at which level of the economic pyramid they are situated, equal access to products and services. This is the basis of social equity. Engaging the BoP in economic activity by fulfilling the requirements of the BoP.
- A refusal to degrade the environment.
- Economic growth and development to ensure the organisation makes a profit.

Organisations that want to capture new market share, by expanding into the Bottom of the Pyramid (BoP), must completely redesign their business models. The **Business Model Development Strategy (BMDS)** is a framework that will be developed in this thesis. It is assembled from the principles of:

- Sustainable Development: The goals and values of an organisation
- Bottom of the Pyramid literature: The customer
- Business Models: The structure and framework
- Blue Ocean Strategy: The sequence and strategy

The Business Model Development Strategy is a tool that gives organisations an approach to design a business model that successfully targets the BoP and test it during development to ensure that the risk of failure is minimised.



1.2 Research Method

1.2.1 Research Questions

When organisations successfully expand into the target market, both the organisations and the BoP can benefit, which is a great opportunity. But organisations are uncertain about this previously ignored market and unsure how to target it. The following research questions, which were derived from the opportunity and problem identified in Chapter 1.1, need to be researched and solved to attain the goals of this thesis. They are:

- 1) Is the **Bottom of the Pyramid (BoP)** a viable market?
- 2) What are the reasons why organisations struggle to expand into the BoP population successfully?
- 3) Is Sustainable Development necessary when targeting the BoP?
- 4) What strategy must an organisation follow to successfully target the BoP?
 - a. What must the arrangement of the business model and approach of an organisation be in order to target the BoP?
 - b. What is the content of the Business Model Development Strategy components?
- 5) How can the business model be designed to minimise the risk of failure?

The research questions will be used as part of the validation of the research. These questions correspond to the questionnaire that the experts had to answer. More details are provided in Chapter 8.

1.2.2 Hypothesis

The following hypothesis, derived from the research questions, needs to be tested to validate this thesis:

An organisation can target the Bottom of the Pyramid population successfully while simultaneously pursuing sustainable development, if they follow a strategy that formulates an approach to design a business model.

1.2.3 Research Method

The research method that will be implemented is divided into seven parts:

1. General purpose of the research
2. Identifying opportunities
3. Background and literature study
4. Develop a framework
5. Explain the framework
6. Validate the framework
7. Research Conclusion

The literature study will be used to research and explore different aspects of the problem, and a solution will be worked out based on literature, a case study and experts in the field. This solution will then be validated against the research questions and hypothesis.

1.2.4 Research Scope and Assumptions

Implementation of the Business Model Development will take very long and falls outside the scope of this thesis. Therefore, it will not be implemented because of the time constraints that are experienced. The Business Model Development Strategy will be described conceptually using literature, examples and a case study.



This research is based on very generalised information on poverty and is not specified for any specific area or culture. The Business Model Development Strategy is a generic framework and it is therefore very important that organisations customise it for their own industry and market.

The concept of the Bottom of the Pyramid, which is the population living below the poverty, is slightly adjusted for this thesis. Obviously, the 'poorest of the poor' cannot be a viable market, because they have no money. So, the 'target market' of the BoP is that part of the market that is currently untargeted and lies at the BoP. Expanding into a market that is lower in the economic pyramid than what organisations are currently serving will make products and services available to a previously unserved market, increasing the organisation's market share and profits, while improving social equity. Figure 3 shows how an organisation can increase its market share by expanding into a 'lower' economic market, the BoP.

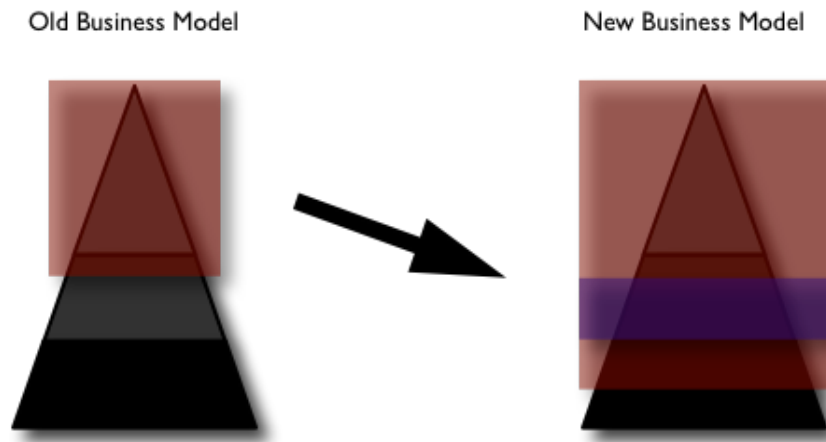


Figure 3: Expanding into the BoP market by designing a new business model

This thesis focuses on designing a new business model for the whole economic pyramid, including the BoP. The business model must be able to work for the upper levels of the pyramid as well; otherwise, an organisation limits the size of its market share. An organisation must find the commonalities for the whole pyramid and design the business model from the bottom up.

This thesis doesn't directly consider the influence of HIV/AIDS and crime on poverty and business in general. HIV and crime have a major impact on social circumstances in South Africa, because that is a completely different field of study.



1.3 Document Layout Structure

The layout of this document was designed to promote the systematic and logical flow of the work. Four major aspects are researched first, and they are combined at a later stage.

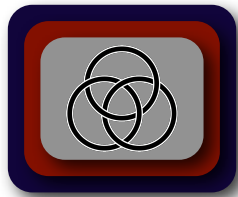
Every chapter is allocated a different iconic image that will promote logical flow and guide the reader through the document. These iconic images will be used in the header of the document to give the reader context for each chapter.

The following is a short description of the document structure and chapter content:



Chapter 1: Introduction

Chapter 1 presents the research background by giving the study some context. It then goes on to define the research problems, questions and hypothesis; the research methodology and research boundaries are also established. The last section describes the structure of the document.



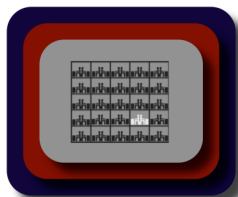
Chapter 2: Sustainable Development

Chapter 2 gives an overview of Sustainable Development. A definition of the term is discussed, and then the three pillars of Sustainable Development are examined: Social Equity, Environmental Quality and Economic Growth and Development.



Chapter 3: The Bottom of the Pyramid Population (BoP)

Chapter 3 gives an overview of the BoP population by first exploring the concept of poverty and then considering the BoP as a viable market. The Sandbox Innovation tool is introduced, which identifies the BoP's constraints and determines its core requirements.



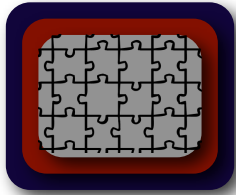
Chapter 4: Business Models

Chapter 4 investigates the concept behind the business model by looking at different ideas and definitions of the term. It then goes on to explain why Osterwalder's business model ontology is the most comprehensive business model in literature, before describing Osterwalder and Pigneur's Business Model Canvas, which is a tool that assists organisations in designing their own business model.



Chapter 5: The Blue Ocean Strategy

Chapter 5 gives a description of the Blue Ocean Strategy by first defining it, then looking at the cornerstone of Blue Ocean Strategy, namely Value Innovation. The tools and analytical frameworks that are presented will be examined. Lastly, the six principles to create a blue ocean will be discussed.



Chapter 6: The Business Model Development Strategy

Chapter 6 shows how the four main literature topics are combined to form the Business Model Development Strategy. It also shows how the Innovation Sandbox Process was derived from the literature in Chapter 3. The Innovation Sandbox Process will be used in Chapter 7.



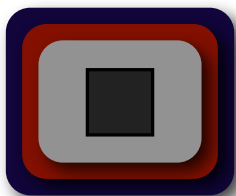
Chapter 7: The Components of The Business Model Development Strategy

Chapter 7 describes each of the Business Model Development Strategy components by using the structure of the Innovation Sandbox Process. It also gives a case study of the business model of Capitec bank for each component.



Chapter 8: Validation

Chapter 8 shows how the thesis was validated using expert analysis and a case study.

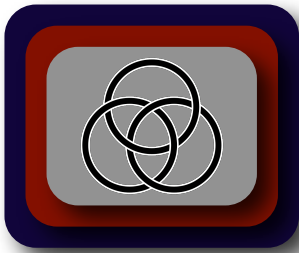


Chapter 9: Conclusion

Chapter 9 offers a conclusion of the research results, which is drawn from the validation chapter. This chapter also recalls the most important aspects of the research and points to further avenues in the future.



Sustainable Development



Chapter 2 provides an overview of sustainable development. First, the concept is defined, and then the three pillars of sustainable development, namely social equity, environmental quality and economic growth and development are discussed.



2 Sustainable Development

This chapter brings the problem statement in perspective by elaborating on the goals an organisation must achieve to fulfil the hypothesis (Chapter 1.2.2), which is:

An organisation can target the Bottom of the Pyramid population successfully while simultaneously pursuing sustainable development, if they follow a strategy that formulates an approach to design a business model.

Sustainable Development is widely supported, but it is a term that is inconsistently defined and often misunderstood. It means different things to different people, depending on their context and objectives. Sustainable Development has become a buzzword that is employed carelessly, and sometimes can be a rather vague concept.

2.1 Introduction

The Brundtland Report (5), published in 1987, established the term “sustainable development” in international circles. It defined sustainable development as development that “*meets the needs of the present without compromising the ability of future generations to meet their own needs*” (5). Sachs and Reid (6) state that Sustainable Development supports economic growth that doesn’t impact the environment in a negative way.

Hasna (7) explains Sustainable Development as the resolution of the conflicts that arise between various competing and even contradicting goals when organisations pursue social equity, environmental quality and economic development at the same time. Sustainable development examines the relationship and interaction between environmental, economic and social benefits. Figure 4 shows the three pillars of Sustainable Development. These three pillars, social, environmental and economic, are known as the Triple Bottom Line (TBL), a term coined by John Elkington in his book, *Cannibals with forks: the Triple Bottom Line of 21st century business*, in 1998 (8). TBL accounting takes the traditional measurement of an organisation’s performance to a new level by including economic, social and environmental performance criteria in its measurement system. John Elkington’s consultancy SustainAbility coined the slogan “people, planet, profit” for Shell in 1994 and it was later elaborated on in his book (8). “*People, planet, profit*” clearly describes the concepts of the TBL and sustainable development.

What Sustainable Development essentially means is that after an organisation has engaged in business the people need to be better off, the planet must not have degraded, and the organisation’s economic position must have improved as well.

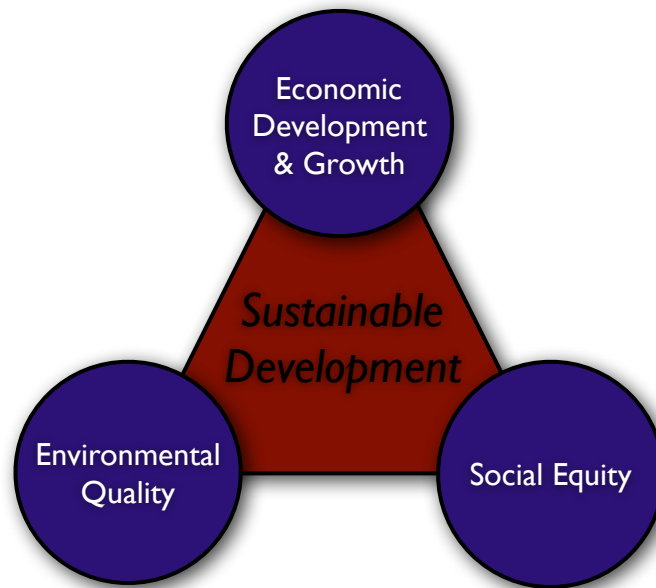


Figure 4: The three pillars of Sustainable Development

In order to secure Sustainable Development, an organisation must ensure that all stakeholders – employees, customers, shareholders and society – are treated fairly. Organisations must design their products, processes, practices and premises to avoid environmental degradation and simultaneously ensure that a profit is made.

It is important that social and environmental sustainability be placed at the core of organisational practices by continually developing and improving them.

2.2 The Social Pillar of Sustainable Development

The social pillar of Sustainable Development focuses mainly on social equity. It is concerned with the fair treatment of society. Social equity and social equality are often used interchangeably. The definitions of both terms are inconsistent and ill-defined in literature.

Equality means the state of being equal while equity means fairness. Therefore the biggest difference between social equality and social equity is that social equality aspires to the equal treatment of all individuals, while social equity works towards the fair treatment of each individual.

In this thesis the following definition for social equity will be used:

Social equity “implies fair access to livelihood, education, and resources; full participation in the political and cultural life of the community; and self-determination in meeting fundamental needs” (9).



Sustainable Development strives for social equity, which means:

- Fair income distribution;
- Fair access to income and education;
- Fair distribution of costs and benefits of environmental protection;
- Fair trade;
- Fair access and prices between all social, gender, racial and cultural groups;
- Similar chances of well-being between generations, also known as intergenerational equity.

By targeting the Bottom of the Pyramid population, some of the social inequity of excluding them from economic activity can be eliminated. Organisations that serve the BoP will give them access to products and services that they previously didn't have. There is no discrimination against them, and they are not ignored because they are poor. When organisations invest in emerging and developing markets, they can lift *"billions of people out of poverty and desperation, averting the social decay, political chaos, terrorism, and environmental meltdown that is certain to continue if the gap between rich and poor countries continues to widen"* (4). Organisations must be careful to not sell products and services to the BoP that they do not need and cannot really afford, because this can decrease their welfare. Exploiting the BoP can lead to greater inequity.

Organisations must encourage social equity in society. Poverty is a form of social inequity, because the poor don't always have fair access to products and services due to constraints such as lack of decent infrastructure, low income, lack of education, and discrimination, among others. Businesses often differentiate between the high-income and low-income population, and products and services are designed to take into account the most valuable consumers, in other words the high-income consumers. Poverty is one of the leading causes of social inequity, and is discussed in Chapter 3.1.

2.3 The Environmental Pillar of Sustainable Development

Environmental degradation is a world-wide reality. Increased carbon emissions, soil depletion, large-scale deforestation and pollution have left the quality of our water, soil and air in an unacceptable condition.

A healthy environment consists of water that is unpolluted, soil that is in good condition and air that is clean. A healthy environment is also a basic human need, and in fact, a basic human right.

The resources of the earth are running out and organisations ruin the environment in search of more resources. Landfills are overflowing, polluting the air and water. The cost of waste disposal in South Africa is covered by the government and the citizens who live close to the site. Schumacher (10) says that organisations have difficulty in putting a cost on the environment and are inclined to *"treat as valueless everything we have not made ourselves."* Society takes the environment for granted. No price is paid for the use of clean air, beautiful landscape and scenery. These services are called "ecosystem services". Unfortunately, the real value of nature will only be fully grasped once it has disappeared. Because a zero-cost is paid for "ecosystem services", there is no economic motivation to use it sparingly.

Developed countries had the advantage of developing during a time when there were abundant resources (4). They were irresponsible with their use of resources and a lot of waste was created. Prahalad (4) states: *"The United States' 270 million people – only about 4 percent of the world's population – consume*



more than 25 percent of the planet's energy resources. To re-create those types of consumption patterns in developing countries would be disastrous". It is therefore important that every aspect of an organisation be designed to be environmentally friendly.

The organisation is responsible to preserve environmental quality by considering the **4 P's of sustainable design** in all their decisions. The 4 P's of sustainable design was developed by the author of this thesis as a comprehensive term for the buildings, processes, systems, products, services, culture, and operations that an organisation must design and set up.

The 4P's were devised from work done by Osterwalder and Pigneur, and Anastas and Zimmerman. Osterwalder and Pigneur (11) categorised resources as physical (all assets), intellectual (brands, databases and intellectual property), human (people) and financial (cash). Paul T. Anastas and Julie B. Zimmerman (12) identified new materials, products, processes and systems that need to be designed. Combining all these items, the "4 P's of sustainable design" was derived. The components of the 4 P's of sustainable design are:

- **Products:** all products and services that the organisation supplies, the materials they use and any brands and databases.
- **Processes:** all the processes and activities in the value chain (e.g. design, manufacturing, distribution etc.) and any systems.
- **Practices:** all practices that the organisation participates in, from daily operational activities, organisational culture, and waste disposal to energy usage.
- **Premises:** the ways in which organisation's buildings and their surroundings are designed.

Organisations have a responsibility to the environment and the society to design the 4 P's using the principles of **sustainable design**. The term "sustainable design" was coined by EF Schumacher in his book *Small Is Beautiful* (10).

McLennan (13) stated that the aim of sustainable design is to "*eliminate negative environmental impact completely through skilful sensitive design.*" It focuses on designing products, processes, practices and premises (the 4 P's) that comply with the principles of sustainable development. Sustainable design can reduce costs, because energy and resource use is reduced.

In their article, *Design through the 12 principles of green engineering*, Paul T. Anastas and Julie B. Zimmerman (12) provide a framework called the 12 Principles of Green Engineering to assist scientists and engineers with designing more environmentally and socially sustainable products, processes, practices and premises. Designing the 4 P's using the 12 principles will enhance the social, environmental and economic objectives of the organisation. The 12 principles are:

1. Designers need to strive to ensure that all material and energy inputs and outputs are as inherently non-hazardous as possible.
2. It is better to prevent waste than to treat or clean up waste after it is formed.
3. Separation and purification operations should be designed to minimize energy consumption and materials use.
4. Products, processes, and systems should be designed to maximise mass, energy, space, and time efficiency.
5. Products, processes, and systems should be "output pulled" rather than "input pushed" through the use of energy and materials.



6. Embedded entropy and complexity must be viewed as an investment when making design choices on recycle, reuse, or beneficial disposition.
7. Targeted durability, not immortality, should be a design goal.
8. Design for unnecessary capacity or capability (e.g., “one size fits all”) solutions should be considered a design flaw.
9. Material diversity in multicomponent products should be minimised to promote disassembly and value retention.
10. Design of products, processes, and systems must include integration and interconnectivity with available energy and materials flows.
11. Products, processes and systems should be designed for performance in a commercial “afterlife”.
12. Material and energy inputs should be renewable rather than depleting.

Paul T. Anastas and Julie B. Zimmerman (12) state that “*when dealing with design architecture – whether it is the molecular architecture required to construct chemical compounds, product architecture to create an automobile, or urban architecture to build a city – the same green engineering principles must be applicable, effective and appropriate.*” The 12 principles provide a framework for designers to create the 4 P’s that maximise sustainability. The only way to ensure that the harm waste does to the environment is eliminated is to generate less waste. New technologies must be more sustainable to ensure that less energy and fewer resources are used, and they must be reusable and recyclable using efficient energy.

2.4 The Economical Pillar of Sustainable Development

When an organisation wants to boost sustainable development and profitability, it is important to acknowledge the difference between economic growth and economic development. To **grow** is to “*increase in physical size*” and to **develop** is a “*qualitative improvement or unfolding of potentials*” (3). A country can experience economic growth without having economic development, and can develop without growing.

Daly (3) states that:

“The rule of sustainable development would be to emphasize technologies that increase resource productivity (development), the amount of value extracted per unit of resource, rather than technologies for increasing the resource throughput itself (growth).”

He goes on to give the example that more efficient light bulbs must be developed to increase the value of each unit of power, rather than building more power plants to increase (grow) the total power output.

The conflict between growth and development, and poverty alleviation and the environment, comes in when it is considered that the five- to tenfold growth of the economy that is a necessary part in sustainable development, according to the Brundtland Report (5), will require a large increase in growth of output. This will have a devastating effect on the environment (3), because more resources will be needed, even if a high emphasis is placed on development.

On the other hand, growth is needed if a country wants to fight poverty. Development can assist the fight against poverty, but it is not enough. When a country is serious about reducing poverty and keeping the environment intact, it has to focus on population control and redistribution aimed at limiting the inequality that wealth can create (3).



Organisations must grow and develop. Growth improves the well-being of an organisation and a country by creating wealth and jobs. Development creates new technologies and products and increases efficiency. Development ensures that competitors don't surpass organisations with better performance offerings and capture their customers. Shareholders and investors also pressure organisations to grow because they want the value of their investments to increase.

When the market expects an organisation to grow faster than it actually does, a growth gap is created. A growth gap is the tendency of the markets to discount expected growth into the current share price. It is *"the difference between how fast they are expected to grow and how much faster they need to grow to achieve above-average returns for shareholders"* (14). This means that if managers actually meet these expectations, the shares of the organisation will appreciate only moderately. Therefore if organisations want to increase their share prices they have to grow at a rate that is faster than what is already built into the share price. Consequently, if managers want to reach their growth targets and create shareholder value, they have to find new ways to increase revenues. This can be done either by improving their current offerings (sustaining innovations) or by expanding into new markets or building new products (developing).

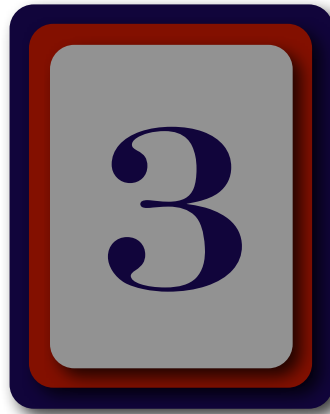
One way to achieve growth and development is by expanding into new uncontested markets such as the Bottom of the Pyramid (BoP). Organisations can gain the following from targeting the BoP (4):

- 1) Growth
- 2) Profit
- 3) Incalculable contribution to social equity

Organisations must also remember that emerging, developing markets where modern infrastructure and basic products are still in short supply make ideal testing grounds for organisations to develop sustainable products and technologies that can later be expanded into the rest of the world (4).

2.5 Chapter Summary

The objective of this chapter was to introduce the concept of Sustainable Development to this study. Organisation that consider Sustainable Development a necessity when engaging in business, are forced to rethink their whole strategy, because the three pillars of Sustainable Development can be in conflict with each other. Sustainable Development must be a prerequisite when organisations want to target the BoP because with increased economic activity, that can harm the environment, and the dangers of exploiting the BoP, which can increase social inequity, comes great responsibility. When an organisation wants to target the BoP while simultaneously experiencing economic growth and development, and improved social equity and environmental quality, it has to completely redesign its business model to overcome these conflicts. But first, an organisation has to understand its target market: the **Bottom of the Pyramid (BoP)** population.



The Bottom of the Pyramid (BoP) Population



Chapter 3 provides an overview of the Bottom of the Pyramid (BoP) population by first looking at the notion of poverty and then at the BoP as a possible target market. The chapter also introduces the Innovations Sandbox that was devised by CK Prahalad.



3 The Bottom of the Pyramid Population

CK Prahalad (4) has defined individuals living on less than \$1500 per year as the **Bottom of the Pyramid (BoP)** population. \$1500 per year is considered the minimum amount necessary to sustain a decent life. More than two-thirds of the world's population fall in this category. The biggest challenge facing organisations that consider targeting the BoP face is “selling to the poor and helping them improve their lives by producing and distributing products and services in culturally sensitive, environmentally sustainable, and economically profitable ways” (4). The BoP often lives in poverty, a concept that will be discussed next.

3.1 Poverty

Poverty is a reality that most Third World countries face. It indicates a material lack, especially if an individual lacks the resources to survive. The World Bank (15) describes poverty as follows:

“Poverty is pain. Poor people suffer physical pain that comes with too little food and long hours of work; emotional pain stemming from the daily humiliations of dependency and lack of power; and the moral pain from being forced to make choices such as whether to pay to save the life of an ill family member or to use the money to feed their children.”

Another interpretation by the Studies in Poverty and Inequality Institute (SPII) (16) is:

“People who are able to survive may still be considered poor if survival requires them to give up their self-respect or if they are not able to fulfil their minimal social obligations in society.”

Extreme poverty exists when an individual doesn't have the “ability to satisfy his or her nutritional requirements, one of the most basic needs of man” (17). More than one billion people live on less than \$1 a day, the official measure of poverty (18). When people live in extreme poverty, they are chronically hungry and lack safe drinking water. Extreme poverty is the type of poverty that kills (18).

A dimension of poverty that is receiving attention is the inequity in society caused by poverty, where the poverty level of an individual is measured against the expectations of society. Galbraith (19) proclaims that:

“People are poverty-stricken when their income, even if adequate for survival, falls markedly behind that of the community. Then they cannot have what the larger community regards as the minimum necessary for decency; and they cannot wholly escape, therefore, the judgment of the larger community that they are indecent. They are degraded, for, in a literal sense, they live outside the grades or categories which the community regards as respectable.”

This is known as **relative poverty**. People are poor relative to the community surrounding them. Poverty doesn't just consist of physical aspects like lack of material possessions, but also many psychological and social aspects like the humiliation, shame and embarrassment that individuals may suffer when they are unable to take care of themselves and their families.

There are two threads of poverty. The first thread of poverty is the **social aspect**. This looks at how conditions of scarcity can be linked to the distribution of power and resources in society. The social aspect of poverty recognises that poverty can also be defined as the condition where people cannot fully live the type of life they want to live because they lack basic education, political capacity, health care or access to information (20). It connects with the social inequity that is experienced throughout the world. Sustainable Development's social



pillar focuses on treating all people with dignity, and giving them an equal chance to take part in economic activity and improve themselves. In a study called “Voices of the Poor”, done by the World Bank a poor, blind woman from Tiraspol, Moldova said:

"For a poor person everything is terrible - illness, humiliation, shame. We are cripples; we are afraid of everything; we depend on everyone. No one needs us. We are like garbage that everyone wants to get rid of" (21).

The second thread is the **economic aspect**, which mostly relates to the material needs of people. These needs include nutrition, shelter, clean drinking water and health. This sense of poverty is understood to focus on the struggle of individuals to effectively meet their basic needs, because they experience a lack of income.

There are many different factors that cause poverty: corruption, natural disasters, diseases and war, to name a few. One of the main factors is scarcity of resources. Before the industrial revolution, poverty was accepted as inevitable. The industrial revolution caused high economic growth that eliminated mass poverty in the developed world. More than 75% of the world's population lived on less than \$1 a day in the 1820s, while only approximately 20% (1.2 billion) do in 2001 (22,23). It is difficult to compare these two eras, because many changes have occurred. The industrial revolution made products more affordable and accessible. Innovations like the steam engine started the initial decline in mass poverty and currently new cellular phone technologies open many markets to the poor, previously ignored market (23).

3.2 Targeting the BoP

The **Bottom of the Pyramid (BoP)** population is a very difficult market to target, due to the many constraints that exist there. Historically this market has been ignored by large organisations, and the BoP isn't considered a viable market because of its low profit margins. But organisations must take into account that for the first time billions of aspiring poor are joining the economic surge and they can offer great opportunities to organisations willing to jump into the deep end (4).

Organisations and the economy at large have made certain core assumptions about the BoP population and its practices. These assumptions influence the perspectives organisations have about the **people** at the BoP. Some typically false assumptions are displayed in Table 1, which Prahalad (1)(4) has identified:



Table 1: Some assumptions about the BoP

Assumption	Reality
The poor have no purchasing power and no use for new products and services.	The sheer scale of this market makes it interesting. Two-thirds of the world's population are considered to be part of the BoP, and their combined resources make them a worthwhile market. The vast size of the BoP can make it a multi-trillion dollar industry.
The poor are not brand-conscious .	A high degree of brand and value consciousness exists in the BoP. Social status is the honour or prestige attached to one's position in society and the BoP uses brands and material possessions as status symbols.
The poor are hard to reach .	Innovative thinking around distribution and marketing channels is needed. The organisation must use non-traditional and unconventional channels to reach the BoP.
The poor are unable to use and are not interested in advanced technology .	The BoP has high rates of technology take-up and use. Technology is a status symbol and can empower the poor.

Table 1: Assumptions for the Bottom of the Pyramid population (1)

Often organisations from the high-end markets believe that the BoP will be so grateful to get products and services that it doesn't matter that it is out of fashion and of bad quality. In reality, the poor are very brand- and value-conscious, and products and services give them a social standing in society.

The above-mentioned assumptions come about because organisations take the position of the BoP for granted, without doing their own research and they rely on secondary research to make their decisions. These **assumptions** can be a reason why organisations don't successfully target the BoP.

In poor societies, social status is very important. *"Maintaining social solidarity is of extreme value to poor people, and the inability to reciprocate with gifts or participate in community events can have very harmful consequences ranging from humiliation, loss of honour and psychological distress to social marginalization and exclusion from important social networks. In fact, violation of social norms is often what poor respondents define as poverty"* (15). Poor people don't like to be treated like they are poor. They want the social status of being able to actively participate in the economic activities of their society.

Organisations sometimes make assumptions about the **BoP as a market**: they compare the BoP directly with the upper-and middle-class markets, because of the understanding they have of the high-end of the market. The income level and product selection of the BoP is compared with the upper and middle classes, and since the BoP doesn't seem favourable, they are dismissed (4).



There are certain assumptions about the **BoP as a market** that organisations need to re-examine (4):

1. With the current cost structure of organisations in developed markets, the BoP cannot be targeted profitably.
2. Products and services in developed markets cannot be affordable or used in the BoP.
3. The poor are not interested in new technologies; they are happy with second-generation technology.
4. Organisations don't consider the BoP as a viable business opportunity. They think governments and NGOs must take care of the BoP.
5. Organisations think that their managers are not interested in solving any business challenges with a humanitarian angle.
6. Organisations think that good managers will not be challenged and excited by the BoP market, and that they don't want to work there.

All these assumptions completely distort the true potential of the BoP. The assumptions arise from the many constraints the BoP face in their daily lives. Constraints are limiting conditions that hinder the lifestyle of the BoP. Some of the biggest **constraints** the BoP face are (21):

- Low-income;
- Lack of education and skills;
- Proximity (isolated, dispersed and distant locations);
- Cultural, lifestyle and language barriers;
- Bad infrastructure.

Often, the BoP cannot be reached by traditional, mainstream distribution and communication channels and credit facilities (4). These constraints are the reasons why organisations struggle to penetrate the BoP market. Organisations often don't **understand** the BoP. The quality and quantity of products at the BoP are also low. Emerging and developing markets have a very large informal sector, and organisations must find local solutions to their problems.

Most organisations have chosen to focus its strategies on the upper- and middle-class segments of the emerging markets and have been uneasy with the idea of pursuing opportunities in emerging markets. The reasons are (24):

- Corruption in emerging countries;
- Poor infrastructure in areas where the BoP lives;
- Non-existent distribution channels;
- Illiteracy and lack of education;
- Lack of robust and enforceable legal frameworks;
- Religious or racial conflict;
- War or violent insurgencies.

These were the reasons why organisations rather chose to target markets that can be captured with little effort: the middle and upper classes.

The high-end market is situated at the top of the economic pyramid. This is generally the market that has skills, wealth and the need for top performance, high speed and good technology products. This market includes not



only the high-class market, but also targets those markets that demand high performance and can effectively use these “advanced” products. The products in this market segment are typically expensive, complex, and luxurious, with all sorts of gadgets and gimmicks. The lowered of the market needs simpler and more affordable products. **Simpler products don’t mean products of lower quality.** It just means that most excess is eliminated. The BoP falls in the low-end market. Most organisations deem the challenges of the BoP overwhelming and unconquerable.

CK Prahalad, provided 12 principles based on his research, that constitute the building blocks of ‘a *philosophy of innovation*’, especially for the BoP market. These 12 principles follow below (1):

1. Focus on (quantum jumps in) **price performance** – *Organisations must completely reconsider how they will price products.*
2. **Innovation Hybrids** – *Blending old and new technologies –Advanced technologies must be creatively combined with existing (and evolving) infrastructure.*
3. **Scale of Operations** – *The basis of return on investment is volume. Therefore, all solutions must be scalable and transportable across countries, cultures and languages.*
4. **Reduce resource intensity** – *The BoP forces organisations to come to terms with the use of resources in new ways, because resources are limited. Products and business practices need to be eco-friendly, and the pattern of resource use must be examined.*
5. **Radical Product Redesign** – *from the beginning –It is important that organisations recognise that functionality in products and services in the BoP market might be different from the functionality that is available in developed markets. Organisations can’t just make marginal changes to existing products that are currently in existence in established markets, they need to rethink functionality completely.*
6. **Process Innovation** – *An organisation must build logistics and manufacturing infrastructure that is sensitive to the prevailing conditions of the BoP. All the processes must be redesigned to fit into the available infrastructure.*
7. **Deskilling of Work** – *Most of the BoP population are poor in skills. Product and service design must take poor skill level, poor infrastructure, and the difficulty to access services in remote areas into account.*
8. **Education of Customers** – *An organisation needs to come up with new and innovative approaches to reach “media dark zones”. Organisations need to be creative with educating their potential customers on the use of their products and services.*
9. **Designing for hostile infrastructure** – *All products and services need to be designed to overcome the low quality of infrastructure like noise, unsanitary conditions, the abuse that products must endure, dust, electricity (wide fluctuations, voltage blackouts and brownouts) and water pollution.*
10. **Interfaces** – *The research an organisation does on its interfaces is critical. They must remember that most of the customers in BoP markets are first-time users of products and services and it is very important that the learning curve is not long and arduous.*
11. **Distribution** – *Accessing the customer –An organisation must figure out how to target highly dispersed and highly dense markets. Designing methods for accessing the BoP at a low cost is critical.*
12. **Focus on broad architecture** – *Organisations need to design their architectures in a way that makes incorporating new features in a product quick and easy. They must therefore challenge conventional thinking.*

These 12 principles are some of the activities and elements that need to be considered in order to overcome the constraints that exist at the BoP. CK Prahalad has devised the **Innovation Sandbox** that assists organisations in penetrating the BoP, by overcoming the constraints that organisations face there. These types of breakthrough creativities and innovations require an open acknowledgement of limits.



3.3 The Innovation Sandbox

The Innovation Sandbox is a guide organisations can use to fulfil the core requirements of the BoP, by coming up with innovative solutions to resolve the problems and overcome the obstacles. This model is applicable to the BoP, because it is a problem-solving tool that focuses on constraints to identify new opportunities. Organisations often don't know how to **approach** the BoP as a target market, which might be a reason why they struggle to target the BoP successfully. The Innovation Sandbox can assist them.

CK Prahalad (25) has defined the **Innovation Sandbox** as follows:

"A fairly complex, free-form exploration and even playful experimentation (the sand, with its flowing, shifting boundaries) within extremely fixed specified constraints (the walls, straight and rigid, that box in the sand)."

His model is aimed at improving the lives of the BoP, while simultaneously assisting organisations in making a profit.

In an example, Prahalad (25) identified the following four conditions that the healthcare industry (Aravind Eye Hospital has fulfilled these conditions) has to fulfil to design successful breakthrough innovations for the BoP population:

1. The innovation must result in a product or service of **world-class quality**
2. The innovation must achieve a **significant price reduction** compared to a product in the West
3. The innovation must be **scalable**: it must be able to be produced, marketed and used in many locales and circumstances
4. The innovation must be **affordable at the Bottom of the Pyramid**, reaching people with the lowest levels of income in any given society

These conditions were tailored to organisations in the healthcare industry that want to target the BoP. There are organisations that have pursued strategies where they have successfully developed unique products and services for the BoP through experimentation (24). An organisation must accept the challenges and constraints that exist when targeting the poor. Anderson and Billou (24) observe that organisations that have achieved success in the BoP were normally those who have developed an approach that delivered the 4 A's presented in Figure 5.

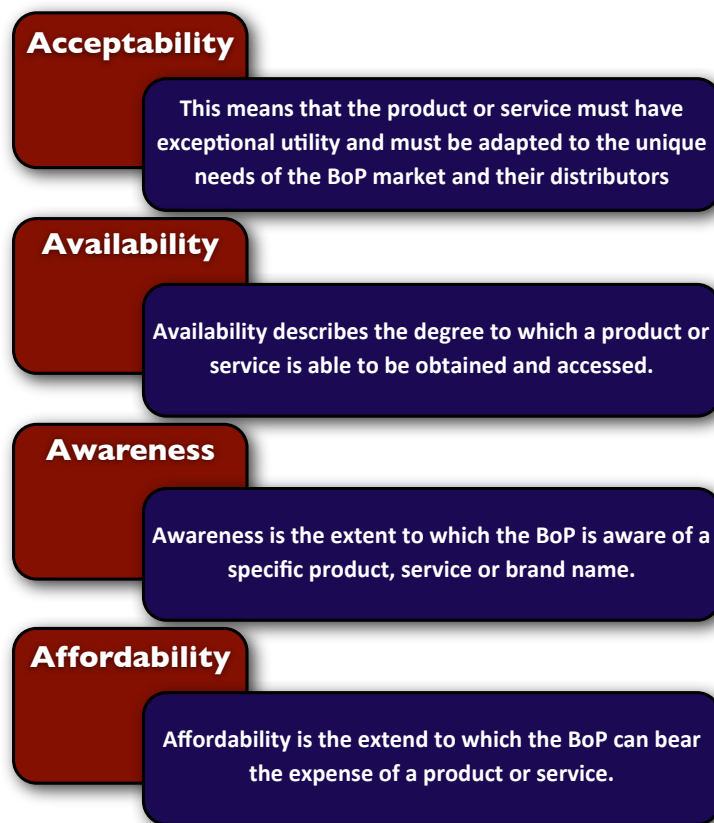


Figure 5: The 4 A's (24)

The Innovation Sandbox is illustrated in Figure 6. The four sides of the sandbox represent the core requirements (4 A's) of the BoP that the organisation needs to fulfil. The core requirements are the constraints (the **walls**) within which the organisation must operate in order to deliver exceptional value to the BoP at a low cost. Accordingly, the **sand** constitutes a creative playing field where they come up with solutions.

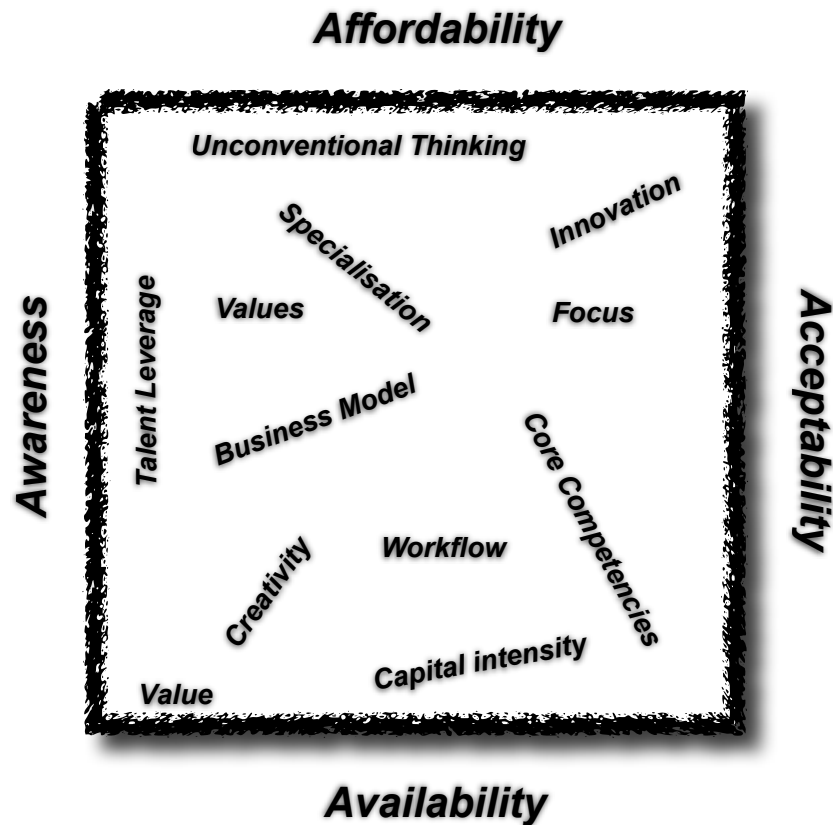


Figure 6: The Innovation Sandbox (adapted from CK Prahalad's Innovation Sandbox (25))

In this thesis, the 4 A's will be used as the conditions (the walls) that an organisation must satisfy to enter the BoP market. It is important to remember that every organisation must customise the core requirements of the BoP specifically for their industry and circumstances. They are a set of self-imposed constraints within which the organisation must operate (26).

3.3.1 The 4 A's – the Core Requirements of the BoP

The 4 A's – Acceptability, Awareness, Availability and Affordability – will be discussed in more detail in this section.

Acceptability

An organisation must design its products and services to ensure that the BoP accepts them. This means that the product or service must have exceptional utility and must be adapted to the unique needs of the BoP market and its distributors (24). Acceptability is the extent to which the BoP and its distributors are willing to buy, use, consume, distribute or sell a specific product or service. An organisation needs to adapt its products and services to (24):



- National or regional culture requirements
- Socio-economic aspects
- Local business practices
- Local infrastructure requirements

Some individuals in emerging countries find status in displaying their material possessions in public and some women get self-worth from the way they look. Beauty products will have a lot of meaning for these people. Priorities in the BoP can sometimes be distorted as status symbols that create relative social standing in their community, and are often more important than long-term saving and education.

When an organisation fails to meet the acceptability requirement of the BoP, the product may be rejected because the BoP will not find it appealing. It might clash with their culture and lifestyle. The solution is to adapt the product or business model to the BoP or educate the BoP and partners on its use and benefits (24).

Availability

Availability describes the degree to which a product or service can be obtained and accessed. It is a huge challenge for organisations to ensure that the product is always easily and consistently available to the BoP. The problem is that distribution channels in the areas where the BoP lives are underdeveloped or non-existent. One of the biggest challenges can be to get the products to the right people (24). Many of the areas where the BoP is located are isolated and difficult to access. Also, the security of an area can be an issue, and due to theft, delays and bad control systems, the products may not always be available. A product needs to be available to all users whenever they need it.

When an organisation fails to make its products available to the BoP, the BoP might reject the product because it is in short supply and they will use a substitute or an alternative. The answer to this problem is to look at alternative distribution channels and technologies, or find weaknesses and rejection points in the current channel and overcome them (24). Organisations must focus their attention to find ways to make product distribution faster, more efficient and more secure. They must aim to develop a distribution system that reaches even the most isolated BoP population. Finding local ways of distributing their products must also be examined.

Awareness

Awareness is the extent to which the BoP is aware of a specific product, service or brand name. The BoP often does not own any basic electronic equipment like a TV or radio, and thus it is a challenge for organisations to reach the BoP and make them conscious of their brand name and product. Usually it is not an option to reach the BoP with conventional media, and even just building awareness of a product can pose a big challenge (24). Therefore, an organisation must consider and explore alternative solutions and communication channels. An organisation must find non-traditional ways to overcome the marketing constraints faced at the level of the BoP. Billboards in rural areas and along public roads can bring awareness to a large segment of a community. Attaching advertisements to vehicles can also spread the word. At the BoP, dealers and shop owners have a big influence on the products that sell. An organisation must gain support from the shop owners and dealers to stock their products on their shelves and recommend it to their customers.

When the BoP isn't aware of a product, it will reject it and go for better-known brands they feel they can trust. This can lead to a loss of sales for an organisation. Therefore, if an organisation can't use conventional media to alert the BoP of its product, it must figure out alternative marketing techniques or send in a direct selling force (24).



Affordability

The BoP is acutely sensitive to price. Affordability is the extent to which the BoP can bear the expense of a product or service. Organisations need to understand that the BoP receives a low disposable income, and that the products or services that organisations offer the BoP need to match their cash flows, which they receive on a daily basis (24). Most of the income of the BoP is spent on food and other basic needs. The rest of the products and services, such as entertainment, beauty products, telecommunications and so forth, are bought with the money that they have left.

Using sachets can satisfy the daily needs of BoP customers, who cannot afford to buy in bulk. These customers can only afford to pay a low price for these types of consumer goods, because they have very little disposable income. Even though sachets are not the most economical way to sell products, Anderson and Billou (24) claim that a large part of the BoP makes four to five trips a week to their local stores. Prices need to be broken down into smaller denominations to be affordable to the BoP.

If the organisation fails to present a product that the BoP can afford, it might be rejected because the product is too expensive or the product doesn't recognise the BoP's lower cash flows. A remedy for this may lie in reconsidering the size of the products (sachets), selling to a larger group of people or completely reconfiguring their product (24).

The 4 A's can be considered the walls of the Innovation Sandbox. They need to be customised for every industry and circumstance. Once the boundaries (walls) of the playing field are established, organisations can start being creative to come up with solutions.

3.3.2 Playing in the Sand – Thinking Inside the Box

Once the walls of the sandbox have been established, it is time for the organisation to turn its attention to '*playing in the sand*'. The sand can be moved around and prodded to come up with solutions within the walls. Unconventional thinking must be forced in several directions. It is very important that an organisation find solutions that are applicable to its industry and circumstances. New solutions must be formulated and any creative means possible must be utilised to solve problems. Organisations must come up with solutions for their market's unique constraints.

The barrier that the Innovation Sandbox creates forces an organisation to look beyond its normal parameters to new and uncharted territory.

Sandbox innovation requires '*in the sandbox*' thinking: all conventions need to be ignored and organisations must continually find ways to improve on their current ways of doing business. The BoP customer base can be one of the best friends an innovative organisation has ever had, because it forces alternative and eccentric solutions due to the limitations.

There is a theory called the **theory of resource dependence** (27), which states that "*while managers may think they control the flow of resources in their firms, in the end it is really customers and investors who dictate how money will be spent because companies with investment patterns that don't satisfy their customers and investors don't survive*" (28). It is extremely difficult to invest in high-end and low-end markets within the same organisation at the same time. This is because the high-end market will usually win the competition for resources since the lead users want these products. They offer the organisation higher profit margins. The most powerful lead users' products usually take the resources from low-end markets and badly defined customer needs.



Resource dependences shows that there is a problem with the organisation's priorities, because it can cause the organisation to miss new opportunities. These lead users are generally happy with the current product or they would have started looking around for other products already.

Instead of taking a high-end business model and trying to cut away fat, noise and excess to compete in the low-end market, a completely new, independent organisation with a **unique business model** can be created from the ground up. Organisations often don't know how to **design** its business models, which can be a reason why it struggles to target the BoP successfully. A business model is the logic of how an organisation creates value for all stakeholders. What follows is an example of the mistakes that Woolworth made. Woolworth is an American retail company.

Disruptive innovations have had devastating effects in the retailing industry, but luckily companies like Kresge, Dayton Hudson and Woolworth started investing early in discount retailing. But only Kresge (Kmart) and Hudson (Target) were successful. Both of these organisations created **independent organisations** to target the low-end market. Woolworth failed because it tried to launch its discount retail store (Woolco) from within its variety store FW Woolworth, without creating a new business model. Woolworth tried to support both sustaining innovations and improvements in capacity, technology and facilities on its existing core business, while at the same time trying to invest in a disruptive, low-end technology. *"Unfortunately (but predictably), Woolworth proved unable to sustain within a single organization the two different cultures, and two different models of how to make a profit, that were required to be successful in variety and discount retailing"* (28).

The example of Woolworth shows that two differing business models can't coexist in harmony in a single organisation. Organisations have one of two options: either they have different business models for different markets or they create a new business model that looks at the needs of the whole economic pyramid, hence expanding into the BoP, without losing the high-end market.

An organisation must start from the beginning when designing a new business model for the BoP. The **entire business model must be redesigned specifically to expand into the BoP**. The technology choices, distribution, marketing, pricing, scale, distribution, workflow and the organisation are all areas that need rethinking, because it will not be feasible to simply try to fine-tune the existing business model (25).

3.4 Chapter Summary

In this chapter it was established that the BoP could be a viable market if organisations approached the opportunity correctly. They must understand that it is humiliating to be poor. The BoP is often afraid to take part in economic activities because they are intimidated and confused by things and how they work. These people also want to be treated with dignity. If an organisation wants to target the BoP, it has to make these customers feel valued. Fair treatment of all classes, cultures, races and genders is essential.

The business model, products and services that the organisations offer the BoP must be tailored to fit their needs and requirements. This chapter also explored the assumptions organisations made about the BoP, and the constraints that drive these assumptions. The Innovation Sandbox is a useful metaphor for understanding the context of the BoP, while positing an environment where systematic problem solving can occur within the constraints.



In this chapter the many different reasons why organisations struggle to target the BoP were identified and explored. The main reasons that were established are:

- Assumptions:
 - Organisations have made assumptions about the BoP;
 - Organisations fear the unknown;
 - Organisations are scared of breaking rules and crossing boundaries;
 - Organisations are stuck in convention;
 - Red tape and excessive bureaucracy exists.
- Understanding
 - Organisations lack insight into the BoP;
 - Organisations do not know what the requirements for the BoP are;
 - Organisations do not understand the constraints that exist at the BoP.
- Approach
 - Organisations are not sure where to start;
 - Organisations do not know how to approach the BoP.
- Design
 - Organisations try to use business models that are tailored for the high-end markets to target the BoP, which doesn't overcome the constraints and fulfill their core requirements.
 - They don't know how to build or test their business models.
- Brand image loss
 - Organisations might not want to expand into the BoP because they don't want to lose their brand identity.

To overcome the main reasons why organisations struggle to target the BoP, new business models must be designed specifically for the BoP. The following chapter will explore different business models to determine the most thorough and inclusive one.



Business Models



This chapter introduces the business model concept. It will describe the nature of the business model, its dynamics, and how organisations can use it to design and describe how they create value and make money.



4 Business Models

This chapter introduces the business model concept. It will describe the nature of the business model, its dynamics, and how organisations can use it to design and describe how they create value and make money.

Firstly, the business model concept will be discussed by focusing on the different definitions, theories and views of the business model. Then, the research and background of Osterwalder's business model ontology will be discussed to show how he derived it. His business model ontology provides a structure, with components and relations between the components, to describe the organisation. This chapter will show that Osterwalder's business model ontology is the most thorough of the business models in literature.

A design tool called the Business Model Canvas, which was created by Osterwalder and Pigneur, will be discussed in detail. The Business Model Canvas will eventually be adjusted to the needs of the Bottom of the Pyramid (BoP) population, and used in its adjusted state in the rest of this thesis.

The purpose of this chapter is to explain why the most comprehensive business model is the one devised by Osterwalder, and show the adjustments that make it suitable for targeting the BoP.

4.1 Business Model Introduction and Definition

In this section, leading business model definitions will be discussed so as to understand the latest trends and formalise a common definition of a business model for further use in this document.

4.1.1 Introduction and Background

Organisations have tried to meet the needs of the BoP by using the same business model that they use for the high-end market, but they have overlooked the special characteristics of the BoP. Such an approach often does not work, because these two markets have fundamentally different requirements and affordability profiles. Therefore, organisations must design a business model that considers the special requirements of the BoP and includes this population in its target market. In this way, **organisations can decrease social inequity and poverty by giving fair access to products and services to both the high-end and low-end of the market.**

A business model is a relatively new concept that became a buzzword during the Internet boom when it was used carelessly and excessively. There exists little consensus between authors on the exact definition, components and scope of the business model.

There is a wide interpretation of business models and organisations might want to know what a business model will do for them. Citibank has come up with some advantages of designing and drawing up a business model (29):

- It helps an organisation review its ideas and goals.
- It helps to identify the products and raw materials organisations will require and the products and services they will produce.
- It will make adaption to changes in the organisation easier in the initial phases of start-up.



- It clears up the decisions that need to be taken about what the organisation will do and how it works.
- It establishes basic financial goals for start-up, operation and profit.

Another advantage of a business model is that it assists in the design of the business plan. At the core of every business plan¹ must be a business model to describe and illustrate the way an organisation creates value and makes money. By designing and working through a new business model, an organisation will understand all the components of the business better and the business model can be used as a great platform from where to write the business plan.

The business model can represent a map, detailing the organisation's current position, as well as providing direction to where the organisation needs to go. It defines the position of the organisation and how it plans to create value for all its stakeholders.

According to Magretta (30), a good business model answers Peter Drucker's age-old questions:

- Who is the customer?
- What does the customer value?
- How do we make money in this business?
- What is the underlying economic logic that explains how we can deliver value to the customers at an appropriate cost?

These questions can be answered in different ways and these answers will be discussed in the next chapter.

4.1.2 Business Model Definition

There are many definitions and schools of thought that rule on the topic of the business model.

The principle underlying all business models is that they can assist an organisation in understanding how value is created and money is made. It is the logic for creating value and shows which activities and approaches are needed for the organisation to be successful (31). The business model shows how the components of the organisation fit together. It can also be described as "*a diagram or blueprint of how a business works to provide value to its target market and produce a profit*" (29). The business model is diagrammatic and it is useful in the design process to describe offerings and processes before designing them. Magretta states that "*the business model's great strength as a planning tool is that it focuses attention on how all the elements of the system fit into a working whole*" (30). The business model shows the relations between all the components and how the components of an organisation work together as a whole.

Over the years many different types of business models have been developed. The reason that each company and author's idea of a business model is different is because only those components that form part of their essential logic within their context are included in the business model (31).

¹The business plan's purpose is "*to describe and communicate a for-profit or non-profit project and how it can be implemented*" (11). A business plan is a statement of goals an organisation has and the plan for reaching those goals. It often includes some background information about the organisation, idea or project.



Chesbrough and Rosenbloom (32) state that *“the ultimate role of the business model for an innovation is to ensure that the technological core of the innovation is embodied in an economically viable enterprise.”* They say a business model must focus on how innovation can be captured in an organisation, to ensure that all value is captured.

Business models consist of components that have to be considered to create value. These core aspects and components typically are: purpose, offerings, strategies, infrastructure, organisational structures, trading practices, and operational processes and policies (33). In his doctoral dissertation, (33) Osterwalder defined a business model as *“an abstract conceptual model that represents the business and money earning logic of a company”*. In 2009, Osterwalder and Yves Pigneur wrote a book called *Business Model Generation* that explored the concept of the business model in more depth. In this book (11), they provide the following definition for a business model: *“a business model describes the rationale of how an organisation creates, delivers and captures value”*.

When all these definitions are considered, it can be observed that they all have some basic elements in common. The definitions all agree that a business model is the logic of how an organisation makes money, and can be described using certain components. Hagel and Singer (34) state that *“no matter how monolithic they may seem, most companies are really engaged in three kinds of businesses. One business attracts customers. Another develops products. The third oversees operations.”* Christian Hager (35) supports Hagel and Singer’s statement by saying that *“it is these three components, the who, the what, the how that are the core of business model literature.”* According to Hagel and Singer (34) and Hager (35), the business model consists of three main components: the customer (who), the product (what) and the operations (how). Osterwalder and Pigneur (11), and Chesbrough and Rosenbloom (32) have added another component: the profit component, to bring the financial position into the business model. This was done because cost and revenue is a very important factor in business.

Chesbrough and Rosenbloom (32) wrote a paper called “The role of business models for capturing value from innovation” in which they state that a business model should fulfil six particular functions.

“The functions of a business model are to:

- articulate the **value proposition**, that is, the value created for users by the offering based on the technology;
- identify a **market segment**, that is, the users to whom the technology is useful and for what purpose;
- define the structure of the **value chain** within the firm required to create and distribute the offering;
- estimate the **cost structure** and **profit potential** of producing the offering, given the value proposition and value chain structure chosen;
- describe the position of the firm within the **value network** linking suppliers and customers, including identification of potential complementors and competitors;
- formulate the **competitive strategy** by which the innovating firm will gain and hold advantage over rivals.”

This is the first definition that explores the components of the business model. The **Value Proposition** shows what products or services an organisation is offering and in what form. The **Market Segment** shows who the customer will be. The **Value Chain** will reveal how value is created in the business models. It will include all the operational activities needed to produce the product or service. The **Cost**



Structure will focus on what price a customer will pay, the pricing model, and how the organisation makes money. The role of customers, suppliers and third parties is discussed in the **Value Network**. The last function of the business model is the **Competitive Strategy**. The latter will consider how an organisation ensures that it stays one step ahead of its competitors (32).

Vadim Kotelnikov (36), author of the website www.1000ventures.com, states that a “*business model converts innovation to economic value for the business. It spells out how a company makes money by specifying where it is positioned in the value chain. It describes how it intends to sustain itself that is to generate money*”. He based his insights on the business model research of Chesbrough and Rosenbloom.

Vadim Kotelnikov used the six functions of Chesbrough and Rosenbloom’s business model to create a visual representation of them by placing Innovation at the centre of the business model, encircled by the six functions. The following figure is adapted from the work of Chesbrough and Rosenbloom and the business model found on the www.1000ventures.com website (36). Figure 7 shows this Innovation-centred business model.

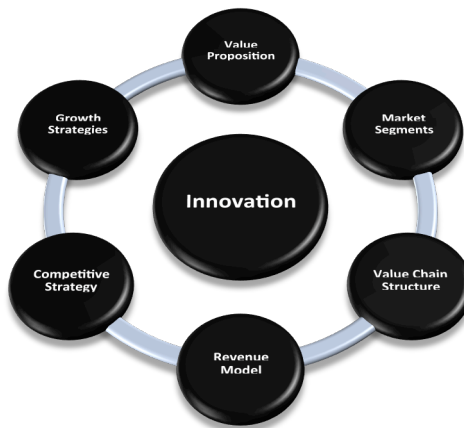


Figure 7: Innovation-centred business model (adapted from Kotelnikov, Chesbrough and Rosenbloom)

These components were the foundation of Osterwalder’s doctoral research, which will be discussed in the next section.

Chesbrough and Rosenbloom (32) argue that “*firms need to understand the cognitive role of the business model, in order to commercialize technology in ways that will allow firms to capture value from their technology investments*.” A business model allows organisations to understand the architecture of their business and how all the separate departments and components fit together.



The definition that will be used for this thesis is a combination of some of the business model definitions discussed:

Definition of a business model:

“A business model describes the logic of how an organisation creates and delivers value for the customer, and specifies how organisations make a profit². It describes each component, as well as how they work together as a whole.”

This definition considers the operations, the customers, the product and the financials of the business.

The business model is the concept, plan and blueprint of how the organisation will create value for itself and its stakeholders. It shows how an organisation makes money. The business model is at the core of the business plan and thus focuses more on concept proposal than implementation. It looks at various elements in the organisation that are important to generate revenue, at the definition of these building blocks and how they individually fulfil specific demands while still working together as a whole.

4.2 Osterwalder’s Business Model Ontology

It is important to understand the components of a business model as it can be used as a business tool that helps managers understand and describe the business logic of their organisation (33). Osterwalder has done intensive research on business models. He identified three main areas covered in business model literature, namely definition, taxonomies and components. Osterwalder provides an ontology that attempts to describe the business model of an organisation. He also developed a visual business model that shows how the components interact with each other to form a whole.

4.2.1 The Research and Background

In Osterwalder’s doctoral dissertation, entitled *The business model ontology: A proposition in a design science approach*, he compiled a literature study on all the business model research available at that time. He considers strategy as a different entity to the business model and argues that they deal with similar issues but that they exist on different layers (33). Osterwalder states that “*the aim of this dissertation was to propose a business model integrating the existing work and going a step further by conceptualizing every singly element and then integrating them into a whole*” (33).

In his literature review, Osterwalder studied material of business models that spanned the definitions of business models, the components, taxonomies, different design tools, change methodologies and evaluation measures (33). The authors Osterwalder studied ranged from Stahler (37), Weill and Vitale (38), Petrovic and Kittle (39), Gordijin (40), Afua and Tucci (41), Tapscott and Ticoll (42), Linder and Cantrell (31), Hamel (43), Mahadevan (44), Chesbrough and Rosenbloom (32), Magretta (30), Amit and Zott (45), Applegate and Collura (46), to Maitland and Van de Kar (47).

Osterwalder compared all the different elements of the business models he studied to come up with his own business model components, and explained the relationship between them. This comparison is

²The aim of this study is to make a profit without compromising social equity and environmental quality. Therefore, non-profit organisations are not considered in the definition, even though they can make use of the model.



shown in Table 2 and Table 3. These tables also show elements that other authors have proposed and how they relate to Osterwalder's building blocks (33). Osterwalder used the contributions of the authors to construct a new model. Each of the nine building blocks of Osterwalder's business model ontology is covered by at least two of the authors that he had studied. He decided to exclude the strategy and competition elements from his model because he believes that even though they are related to the business model, they do not form an integral part of it. He believes that a strategy must be drawn up that positions the organisation in the competitive landscape, and only then must the business model be designed (33).



Table 2: Osterwalder relates his building blocks to other business model elements in literature (Part 1)

Business Model Ontology	Stahler 2001	Weill and Vitale 2001	Petrovic, Kittle et al.	Gordijn 2002	Afua and Tucci 2003	Tapscott, Ticollet al. 2000	Linder and Cantrell 2000
Value Proposition	Value proposition	Value proposition, strategic objective	Value model	Value offering	Customer value		Value proposition
Target Customer		Customer segments		Market segment	Scope		
Distribution Channel		Channels	Customer relations model				Channel model
Customer Interface			Customer relations model				Commerce relationship
Value Configuration	Architecture		Production model	Value configuration	Connected activities, value configuration	b-webs	Commerce process model
Capability		Core competencies, CSF	Resource model		Capabilities		
Partnership	Architecture	e-business schematics		Actors		b-webs	
Cost Structure				Value exchange	Cost structure		
Revenue Model	Revenue model	Source of revenue	Revenue model	Value exchange	Pricing, revenue source		Pricing model, revenue model



Table 3: Osterwalder relates his building blocks to other business model elements in literature (Part 2)

Business Model Ontology	Hamel 2000	Mahadevan 2000	Chesbrough and Rosenbloom 2000	Magretta 2002	Amit and Zoit 2001	Applegate and Collura 2001	Maitland and Van de Kar 2002
Value Proposition	Product/ market scope	Value stream	Value proposition	What does the customer value?	Transaction component	Products and services offered	Value proposition assumed value
Target Customer	Market scope		Market segment	Who is the customer?		Market opportunity	Market segment
Distribution Channel	Fulfilment and support, info and insight			How can we deliver value at an appropriate cost?		Marketing/ sales model	
Customer Interface	Relationship Dynamics					Brand reputation	
Value Configuration	Core processes	Logical stream	Structure of the value chain		Architectural configuration	Operating model	
Capability	Core competencies, Strategic assets					(Organisation and culture, management model)	
Partnership	Suppliers, partners, coalitions		Position in the value chain		Transaction component	Partners	Companies involved in creating value
Cost Structure			Cost structure	What is the underlying economic value?			
Revenue Model	Pricing structure	Revenue stream		How do we make money in this business?		Benefits to firm and stakeholders	Revenue model



Osterwalder compared the most cited business model literature to produce a comprehensive business model that included and combined some of the literature he studied. The business model ontology that was created and identified by Osterwalder is discussed next.

4.2.2 Osterwalder's Business Model Ontology

The business model ontology devised by Osterwalder consists of four main areas, which he broke up into nine building blocks. The four main areas are connected to the four perspectives that are seen in Norton and Kaplan's Balanced Scorecard approach (48): Products, Customer, Financial and Infrastructure. Figure 8 below shows the business model ontology that Osterwalder came up with (33):

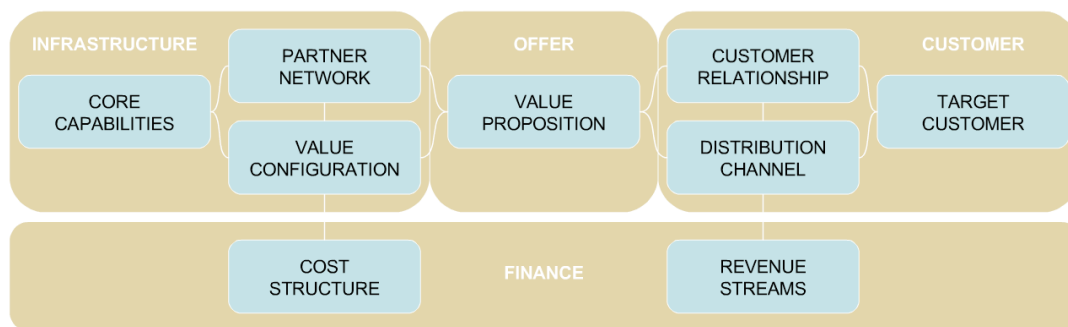


Figure 8: Osterwalder's Business Model Ontology (33)

Osterwalder created this business model as a framework (Figure 8) for organisations to describe their own businesses clearly and help them design better business models.

Table 4 explains the components business model in a bit more detail:

Table 4: Components of Osterwalder's business model (33)

Main Area	Definition	Building Blocks	Definition
Product	What business the company is in, the products and the value proposition offered to the market	Value Proposition	It is the overall view of one of the firm's bundles of products and services that together represent value for a specific customer segment.
Customer Interface	Who the company's target customers are, how it delivers them products and services, and how it builds a strong relationship with them.	Customer	It is the type of customer a company wants to address. The target audience for a business' products and services.



Main Area	Definition	Building Blocks	Definition
		Relationship	The links a company establishes between itself and its different customer segments.
		Channel	It is the connection between the customer and the product. The means by which a company delivers products and services to customers. This includes the company's marketing and distribution strategy.
Infrastructure Management	How the company efficiently performs infrastructural or logistical issues, with whom, and as what kind of network enterprise	Capability	The capabilities and competencies necessary to execute a company's business model.
		Partnership	The business alliances which complement other aspects of the business model
		Value configuration	The rationale, which makes a business mutually beneficial for a business and its customers.
Financial Aspects	What is the revenue model, the cost structure and the business model's sustainability	Cost	The monetary consequences of the means employed in the business model.
		Revenue	The way a company makes money through a variety of revenue flows. A company's income.

This business model ontology was not very user-friendly, and in 2009 Osterwalder and Pigneur (11) simplified this business model in their book, *Business model generation*. This book is a practical guide organisations can use to design a business model. Osterwalder and Pigneur (11) state that “*the concept must be simple, relevant, and intuitively understandable, while not oversimplifying the complexities of how enterprises function.*” They designed the Business Model Canvas to give organisations a chance to brainstorm and conceptualise the model of their enterprise and analyse the models of competitors and any other organisations that can be benchmarked. The Business Model Canvas is a tool to help an organisation design its business model, and it is an improved version of the business model ontology that Osterwalder defined in his dissertation.

NOTE: For the purpose of this thesis, Osterwalder and Pigneur's Business Model Canvas will be used to describe a business model. The Business Model Canvas is derived from the work done by Osterwalder and Pigneur.



4.3 Osterwalder and Pigneur's Business Model Canvas

What follows is a description and explanation of Osterwalder and Pigneur's Business Model Canvas. The basic structure of the model is still the same as the model Osterwalder described in his dissertation, but some of the individual building blocks have been revised. The business model canvas consists of four main areas, which were broken up into nine building blocks. The four main areas, shown in Figure 9, are connected to the four perspectives that are seen in Norton and Kaplan's Balanced Scorecard approach (48), namely Products, Customer, Financial and Infrastructure.

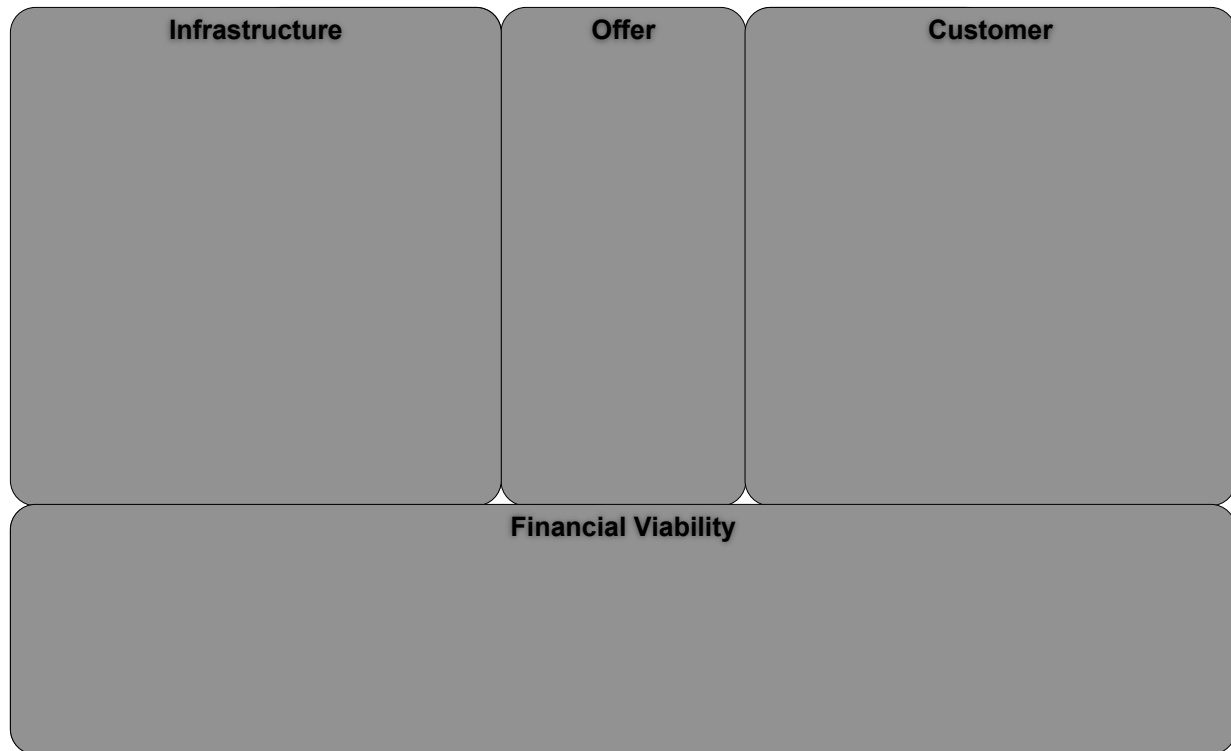


Figure 9: The four main areas of the business model canvas

These four areas can be explained as follows.

- 1) Customers (Customer Segment, Channels and Customer Relationships)
- 2) Offer (Value Proposition)
- 3) Infrastructure (Key Resources, Key Activities and Key Partnerships)
- 4) Financial Viability (Revenue Streams and Cost Structures)

The Customer Area focuses on how the Offer is brought to the customers. The Infrastructure area shows the Infrastructure needed to create the offer and bring it to the customer, and the Financial Viability focuses on how the organisation administrates its costs and makes money.



The Business Model Canvas (33), shown below in Figure 10, consists of nine building blocks. The Customer Segment, Channel and Customer Relationship fall under the Customer area. The Value Proposition falls under the Offer. Key Resources, Key Activities and Key Partnerships fall under the Infrastructure area and the Cost Structure and Revenue Streams fall under the financial area.

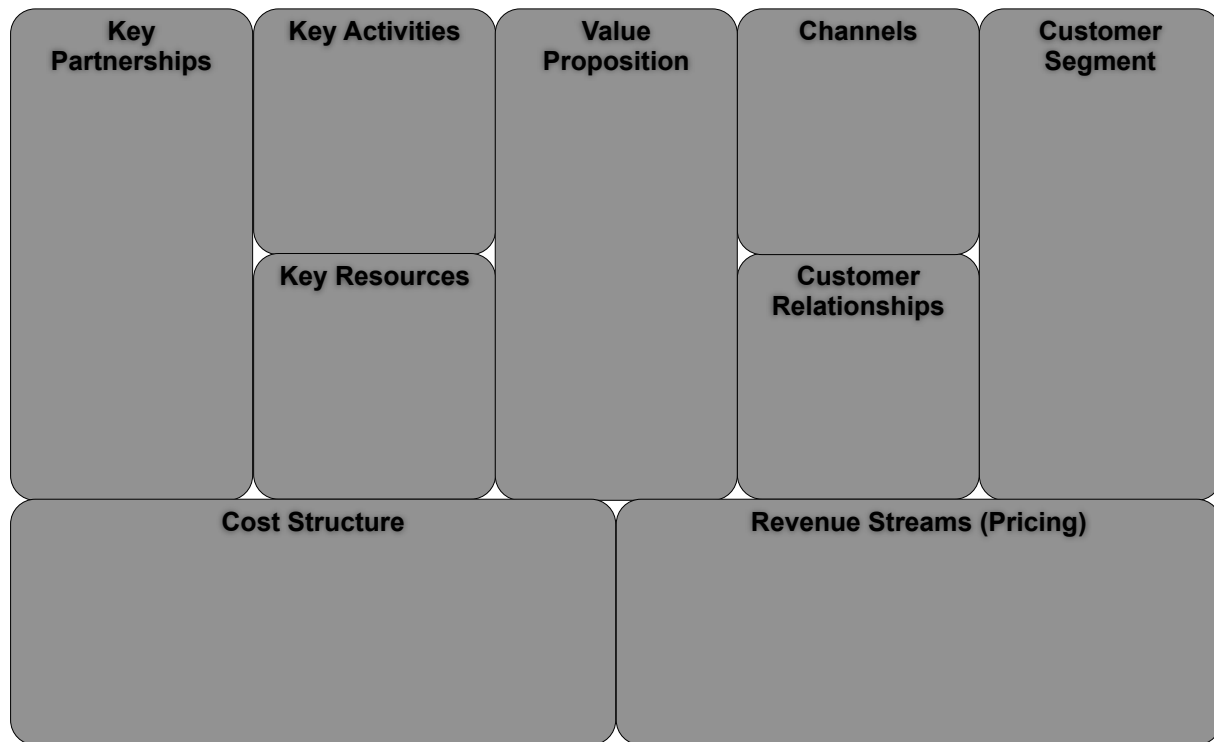


Figure 10: The Business Model Canvas

Osterwalder and Pigneur (11) state that “*the business model is like a blueprint for a strategy to be implemented through organisational structures, processes and systems.*” The nine building blocks for the Business Model Canvas will be discussed briefly:

4.3.1 Customer Segment

The first building block is the Customer Segment, which defines the different groups of individuals that the organisation wants to reach. It is important that an organisation always remember that the heart of the business model is the customer. Some organisations serve only a specific customer segment, while others serve several. It is important that the organisation consciously decide which sectors and segments to pursue and which ones to ignore. Typical questions that must be asked are:

- For whom is value created?
- Who are the most important customers?



The Customer Segment is similar to a Market Analysis, and helps an organisation better understand the customer. To understand whether customer groups represent different customer segments, it is important to examine the following (11):

- Do the needs of a customer require and justify a distinct offer?
- Are different Distribution Channels needed to reach different customers?
- Are different types of relationships required for different customers?
- Do the different customers have substantially different profitabilities?
- Are the different customers willing to pay for different aspects of the offer?

If any of these questions can be answered affirmatively, then the chances are good that the organisation would deal with different Customer Segments. The upper and lower markets represent two distinct market segments.

4.3.2 Value Proposition

The second building block is the Value Proposition. It describes all the products and services that the organisation will offer the customer. The Value Proposition is also the reason customers will switch from one product to another. Typical questions that can be asked while building this block are (11):

- What is the value delivered to the customer?
- Which one of the customer's problems is being solved?
- Which customer needs are satisfied?
- What products and services are currently offered to each customer segment?

It is important to note that value can be both quantitative, for example price and the speed of service, and qualitative, for example design and customer experience. Value creation can come in any of the following forms (11):

- Newness
- Performance
- Customisation
- Design
- Getting the job done
- Brand / status
- Price
- Cost reduction
- Risk reduction
- Accessibility
- Convenience / usability



The Value Proposition that an organisation offers its customers can be either completely radical, which represents a disruptive or new innovation, or incremental, and similar to existing products with some added attributes and features.

4.3.3 Channels

The third building block describes the Channels that the organisation uses to reach and communicate with its customers and how the Value Proposition is delivered. According to Osterwalder and Pigneur (11), some of the questions that need to be answered are:

- Through which Channels do the customers want to be reached?
- How are they currently reached?
- How are the Channels integrated?
- Which Channels work the best?
- Which Channels are most cost-efficient?
- How are the Channels integrated with customer routines?

Osterwalder and Pigneur have included customer support in this building block. They state that the “*communication, distribution, and sales Channels comprise a company’s interface with customers*” (11). The way they see it is that the Channel is the way the organisation communicates with the customer. This building block also looks at the factors that increase a positive customer experience.

4.3.4 Customer Relationships

The fourth block, Customer Relationships, describes all the relationships that an organisation must establish with the specific customer segments (11). The questions that accompany this building block are:

- Which types of Relationships are expected by each Customer Segment to maintain them?
- Which Relationships have been established?
- How costly are these Relationships?
- Are these Relationships integrated with the rest of the business model?

The Customer Relationships range from personal assistance to automated systems, and they greatly influence the general customer experience.

4.3.5 Revenue Streams

Revenue Streams constitute the fifth building block in the Business Model Canvas. These Revenue Streams represent all the cash that is generated by the different customer segments. Questions for this building block are (11):

- For what value are customers willing to pay?
- For what do they currently pay?
- How are they currently paying?
- In which way would they prefer to pay?
- How much does each Revenue Stream contribute to the overall revenues?



There are two different Revenue Streams that can be represented in a business model: once-off payments and recurring payments.

4.3.6 Key Resources

The sixth building block is the Key Resources that describe the most important assets and materials required to make a specific business model work. The Key Resources building block explains how resources are used to create and offer the Value Proposition, and to reach the right markets, what resources are needed to maintain relationships with customers, and eventually earn revenue. The four main assets in an organisation are (11): human, physical, intellectual and financial. The questions that need to be answered are:

What Key Resources are needed by

- the Value Proposition?
- the Distribution Channels?
- the Customer Relationships?
- the Revenue Streams?

Typical examples of Key Resources are: facilities, vehicles, machines, distribution network, IT, logistics, infrastructure, brands, proprietary knowledge, patents and copyrights, partnerships, customer database, intellectual property, human resources and financing.

4.3.7 Key Activities

The Key Activities describe the most important things that an organisation must do to ensure that its business model works. This includes all the actions the organisation must take to operate successfully. The questions that will assist in building this block are (11):

What Key Activities are required by

- the Value Proposition?
- the Distribution Channel?
- the Customer Relationships?
- the Revenue Streams?

The Key Activities are those activities that “are *required to create and offer the Value Proposition, reach markets, maintain Customer Relationships, and earn revenues*” (11). According to Osterwalder and Pigneur, the Key Activities can be categorised as follows:

- Production
 - design
 - manufacturing
 - delivering
- Problem Solving
 - generating solutions to customer problems
- Platform/network: from which to develop other products



The Key Activities building block mainly focuses on the actions that an organisation must undertake to operate effectively and efficiently. It is the operational part in the business model and concentrates on achieving the other building blocks, especially the Value Proposition, the Channels, the Customer Relationships and the Revenue Streams. The other building blocks solve *what* will be done, and the Key Activities building block solves *how* it will be done.

4.3.8 Key Partnerships

The eighth building block is the Key Partnerships. This block describes the network of suppliers and partnerships that an organisation requires to make its business model work. Typical questions that are asked in this block are (11):

- Who are the key partners?
- Who are the key suppliers?
- What are the Resources that the organisation is acquiring from the Partners?
- Which Key Activities are being performed by the Key Partners?

It is often easier to use existing infrastructure to complete Key Activities and that is where Key Partnerships can be useful. There are many different motivations for organisations to form partnerships. These include:

- Optimisation and the advantages of economies of scale (cost reduction)
- Reduction of risk and uncertainty
- Acquisition of particular resources and activities (knowledge and licensing)

There are different types of Partnerships that Osterwalder and Pigneur (11) have identified:

- Strategic alliances between non-competitors
- Coopetition: strategic partnerships between competitors
- Joint ventures to develop new business
- Buyer-supplier relationships

4.3.9 Cost Structure

The Cost Structure is the ninth and final building block of the Business Model Canvas. This block describes all the costs that an organisation incurs when operating the business model. These costs are calculated based on the costs incurred for the infrastructure area of the business model: Key Resources, Key Activities and Key Partnerships. The questions that need to be answered are (11):

- What are the most important costs inherent in the business model?
- Which Key Resources are the most expensive?
- Which Key Activities are the most expensive?

When an organisation wants to target the BoP, a few adjustments need to be made to the component parts to make the use of the business model easier. These adjustments are discussed next.



4.4 A Business Model Canvas for the BoP

In Chapter 3 it was established that the BoP is a market that faces many constraints and problems. Therefore the business model must be tailored for their needs and requirements.

4.4.1 Why the Business Model Canvas needs to be adjusted for the BoP

The BoP is not like the middle- and upper-class markets. It doesn't react to circumstances the same way. Their lifestyle and culture is different, and they are used to struggling. They struggle to live with the little they have and to find products and services that are in close proximity and easy to use, while not costing a fortune.

Organisations must accept and work around the constraints and limitations experienced by the BoP. Personal service and the interface between the customer and the organisation are very important to them. The BoP sometimes lives in faraway, isolated locations that make marketing and distribution difficult. Therefore, Osterwalder and Pigneur's Business Model Canvas must be adjusted.

The changes to the Business Model Canvas are minimal and take the constraints and requirements of the BoP into account by grouping and organising the details in the building blocks slightly differently.

4.4.2 The Adjustments

The changes that are made to the Business Model Canvas when an organisation wants to target the BoP make the distinctions between the different building blocks clearer. These adjustments are as follows:

1. The **Customer Segment** will be called **Customer**, because the segment is already known: the BoP. This building block will be concerned with the needs and requirements of the organisations current and potential customers (overshot and non-consumers).
2. The **Customer Relationship** building block will be renamed **Customer Interfaces**. This block will be concerned with the relationship between the customer and the organisation, how they interact, and how positive customer experience can be increased (a responsibility that this block takes over from the Channels building block).
3. The **Channel** building block concerns itself with distribution and marketing: how the customer is made aware of the product and how the organisation will get the product to the customer on time, in good shape and within budget. The BoP is a very difficult market to target, because it lacks traditional marketing and distribution channels.
4. The **Revenue Streams** building block will mainly focus on **Pricing** and ensure that the BoP can afford the product and a large volume is realised. This block will also consider the pricing model of an organisation and how it makes money.
5. The rest of the building blocks will stay the same.

These adjustments are very slight, and make the Business Model Canvas more useful when the BoP is the target market.



4.4.3 The Adjusted Model

The adjustments having been applied, the Business Model Canvas now looks as follows.

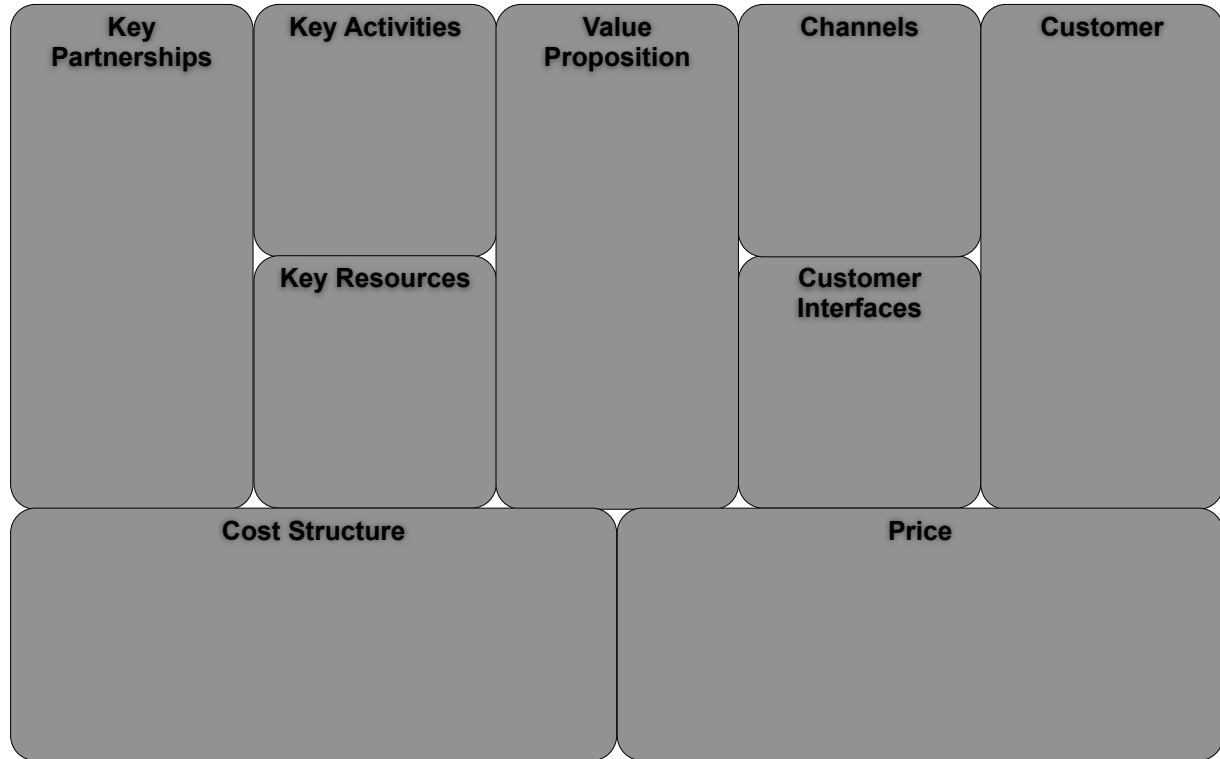


Figure 11: The Business Model Canvas for the BoP

The definition of a business model that will be used in this thesis is a combination of some of the business model definitions discussed in Chapter 4.1.2:

Definition of a business model:

“A business model describes the logic of how an organisation creates and delivers value for the customer, and specifies how organisations make a profit. It describes each component, as well as how they work together as a whole.”

A business model canvas for the BoP will look as follows:



Table 5: A general definition and example of the Business Model Canvas Components for the BoP

Building Block	Relevance
Customer	<p>The organisation must be aware of who their customers are and what their political, economic, socio-cultural and technological environment is. Their needs must be understood to satisfy their core requirements while simultaneously making money.</p> <ul style="list-style-type: none"> If the market is not analysed and understood correctly, the organisation might come up with false assumptions about their customers' core requirements.
Value Proposition (What?)	<p>The offering of the organisation needs to be functional, of a high quality, scalable, simple, robust, sustainable and eco-friendly. If the offering doesn't comply with these conditions, the BoP population will not use it; they will find substitutes or go without it, which will decrease the Revenues Streams of the Organisation.</p> <ul style="list-style-type: none"> If the offering isn't right, the BoP will not use it and the organisation will not make money.
Price (Revenue Streams)	<p>The value proposition of an organisation must be affordable to ensure that the organisation still secures large revenue, even if the profit margins and income of products and services are low. This building block also looks at how an organisation makes money and the pricing model it uses.</p> <ul style="list-style-type: none"> If a value proposition isn't affordable, and hence does not attract a large segment of the BoP, the organisation will not make money.
Channel	<p>For an organisation to make money from the BoP, it needs to reach large volumes of the BoP population (low profit margins). This can only be done if the Marketing and Distribution Channels are effectively reaching a high volume of potential and existing customers. That is why this block is included in the business model.</p> <ul style="list-style-type: none"> If the BoP is not aware of the offering and cannot be reached, the organisation will not make money
Customer Interface	<p>It is important that good relationships be built with the BoP. The BoP needs to feel comfortable with the interfaces used in the organisation; they need to feel they can approach the organisation without fear of humiliation and embarrassment due to confusion and complexities; they need to understand the systems, and the customer services need to be efficient and effective to ensure that they feel acknowledged and recognised.</p> <ul style="list-style-type: none"> If the customers are not satisfied, they will not return, word will spread of the bad service, and the organisation will lose Revenue.
Key Resources (What?)	<p>It is important that the available resources be well managed and used in an innovative way (scarce resources should be used sparingly).</p> <ul style="list-style-type: none"> When some resources are not available, operations and all the Key Activities needed to obtain revenues can be hampered. Expensive resources can push up costs.
Key Activities (How?)	<p>Time is money and if Activities are not completed efficiently and effectively, the organisation will lose money. Therefore, the organisation needs to find ways of decreasing the length of activities in order to push down the cost and improve</p>



Building Block	Relevance
	<p>efficiency.</p> <ul style="list-style-type: none"> If the internal processes of an organisation are not productive, more time is needed and the organisation will lose money.
Key Partnerships (With whom?)	<p>Key Partnerships can assist an organisation to reach markets, provide infrastructure, accelerate penetration into the BoP market, improve the access of an organisation to the BoP market and help foster relationships. Key Partnerships can share their infrastructure to make it easier for the organisation to reach the BoP.</p> <ul style="list-style-type: none"> Costs and complexity can increase if parts of the operation are not outsourced. This can lead to less Revenue for the organisation, because it has to do everything on its own and cannot rely on established knowledge and infrastructure.
Cost Structures	<p>An organisation that wants to make money at the BoP must constantly focus on driving costs down and building a low cost structure. The BoP earns a low income, which means that it has a limited amount of money to spend. Low costs lead to higher profits and because the profit margin in the BoP is very low, any reduction in costs will lead to higher profits.</p> <ul style="list-style-type: none"> Therefore, if the cost structure of an organisation is not low, it will not make any profits and money.

4.5 Chapter Summary

The purpose of this chapter was to choose a business model that can be used in this thesis to target the BoP. Osterwalder and Pigneur's Business Model Canvas was the most comprehensive and some slight adjustments were made to it so that it would be more appropriate for the BoP. The Business Model Canvas components for the BoP are summarised in Figure 12:

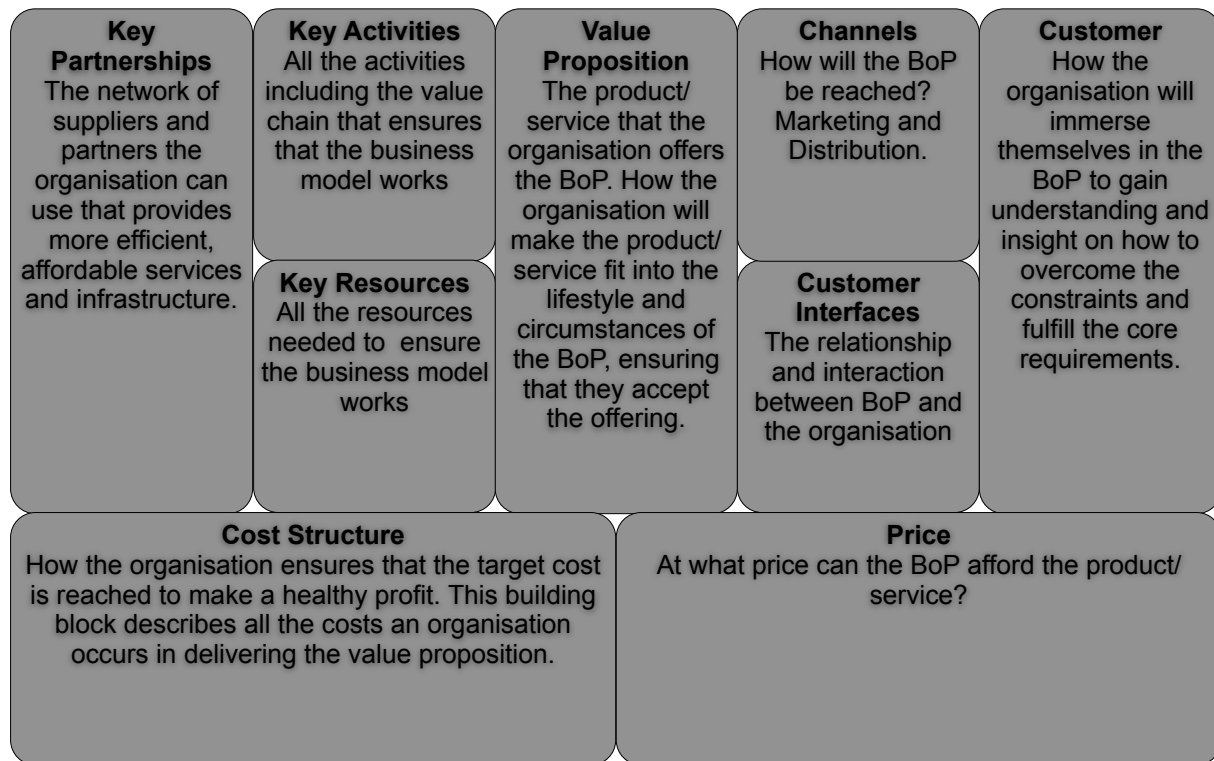


Figure 12: A summary of the BoP Business Model Canvas

Most organisations are unable to be innovative beyond their own business models. They end up becoming the best in their specialised field, because all they can do is sustainable innovation, i.e. improving on what they have. Expanding into the BoP requires the right business model to be able to bring affordable technology and available networks to them, bringing the expensive few options to everyone at an affordable price.

NOTE: A business model cannot be copied from another organisation and quickly adapted. Each organisation must start from scratch when devising and generating its business model. Organisations can look at examples from their competitors and other industries, but eventually each organisation has to reflect on every single component and come up with definitions and solutions that are unique to their specific circumstances.



Blue Ocean Strategy



This chapter introduces the Blue Ocean Strategy concept. The Blue Ocean Strategy was coined by Kim and Mauborgne and is about breaking away from the competition and creating new demand.



5 Blue Ocean Strategy

First, this chapter looks at the Value Innovation concept, which focuses on making the competition irrelevant, by creating more value for the customer at a lower cost (49). Value Innovation is important because of the focus on increasing value while decreasing cost, which is very important when an organisation wants to target the BoP. The main tools, ideas and frameworks are discussed. Then the six principles that can be used to formulate and execute a Blue Ocean Strategy are discussed.

In 2005 W. Chan Kim and Renée Mauborgne wrote a book called *Blue ocean strategy*. They claimed, “*Competing in overcrowded industries is no way to sustain high performance. The real opportunity is to create blue oceans of uncontested market space*” (50). Thus the term **blue ocean** was born. Blue oceans represent all those industries and markets that are not in existence today. They are unknown and completely untainted by competition. The core notion of the blue ocean is that instead of fighting for the same markets, new demand must be created (50). The term **red ocean** denotes all the industries that exist today. This market is known and the boundaries are specified and accepted. In this market companies fight for market share and try to grab a bigger piece of the existing demand (50).

Blue Ocean Strategy creates new demand where none existed in the past. This means organisations basically start serving non-consumers – in the case of this thesis, the Bottom of the Pyramid population. Blue Ocean Strategy starts by creating an uncontested market space, which makes competition irrelevant

5.1 Value Innovation

As competition increases, many organisations come face to face with the huge challenge of maintaining profitable growth. Organisations try to outperform each other by always improving their offering in the hope of snatching a larger share of the existing market. As more competitors enter a specific industry, the expectation of profits diminishes and organisations are left fighting cutthroat battles that turns the markets bloody... the red ocean.

Organisations must rather target uncontested market space: the blue ocean. Kim and Renée Mauborgne’s (49) claim that, instead of competing for the same market segment and going head-to-head with competitors, organisations must target markets and industries that are currently uncontested. They say targeting these blue oceans can lead to very profitable growth. Red oceans rely on conventional strategic logic, while blue oceans focus on **value innovation**.

Value innovation is the cornerstone of Blue Ocean Strategy (49) and it rejects the fundamental principle that a trade-off must exist between low-cost and value. Michael Porter stated that every organisation must decide whether their strategy will focus on differentiation, cost leadership or getting an advantage over the competition (51). It was always believed that organisations had two choices: either they create average value at low costs for their customers, or greater value at higher costs. Kim and Mauborgne (49,52) believe that an organisation can offer its customers value at a low cost, overcoming the value-cost trade-off by pursuing low costs and differentiation at the same time. This is called ‘value innovation’ and can lead to high growth and profits. Figure 13 shows the idea behind value innovation: costs must be driven down while value is increased.

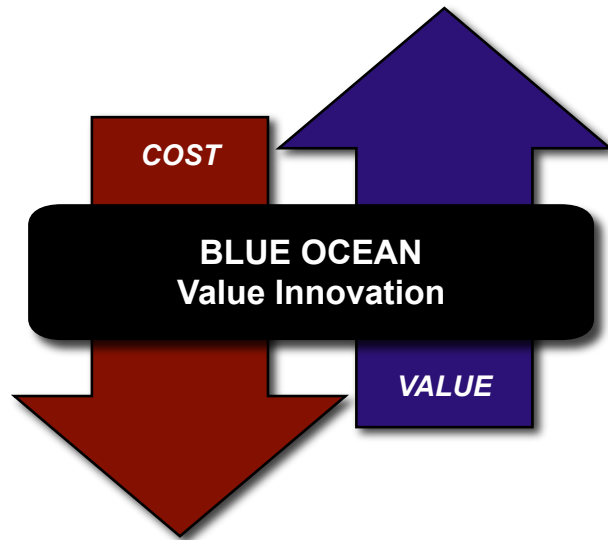


Figure 13: Value Innovation (52)

The five dimensions of strategy include industry assumptions, strategic focus, customers, assets and capabilities, and product and service offerings. These dimensions determine how managers see and pursue opportunities, understand risk, and which questions they ask. The logic behind value innovation and conventional logic differ along the dimensions discussed in Table 6 (52):

Table 6: Two Strategic logics (52)

The Five Dimensions of Strategy	Conventional Logic	Value Innovation Logic
Industry Assumptions	The industry's conditions are given.	The industry's conditions can be shaped.
Strategic Focus	A company should build competitive advantages. The aim is to beat the competition.	Competition is not the benchmark. A company should pursue a quantum leap in value to dominate the market.
Customers	A company should retain and expand its customer base through further segmentation and customisation. It should focus on the differences in what customers value.	A value innovator targets the mass of buyers and willingly lets some existing customers go. It focuses on the key commonalities of what customers value.
Assets and Capabilities	A company should leverage its existing assets and capabilities.	A company must not be constrained by what it already has. It must ask: what would we do if we were starting anew?
Product and Service Offerings	An industry's traditional boundaries determine the products and services a company offers. The goal is to maximise the value of those offerings.	A value innovator thinks in terms of the total solutions customers seek, even if it takes the company beyond the industry's traditional offerings.



Organisations can become stuck between the boundaries that were set up by their industry on the one hand, and conventional thinking on the other. One of the biggest difficulties for any organisation is to break out of the red ocean into the blue ocean. The critical questions for a strategist are (49):

- How do you break out of this red ocean of bloody competition to make the competition irrelevant?
- How do you open up and capture a blue ocean of uncontested market space?

Organisations who want to enter the blue ocean need a strategy.

5.1.1 Characteristics of a Good Strategy

The strategy of an organisation is the plan of action they are going to take to reach their overall target. Top management spends a lot of time drawing up and refining a strategy, but research done by Kim and Mauborgne (53) shows that few organisations have an explicit strategic vision. Kim and Mauborgne believe that the problem is the planning process. Organisations often end up with large, intricate documents that are difficult to understand. Such documents have lengthy discussions and descriptions of topics ranging from competitors to costs to customers and how to capture a new market. They normally include goals and initiatives, as well as a full budget with intense graphs and tables. The information is collected from different sections of the organisation and thrown together. The length and complexity of the documents often prevent the top management and employees from seeing the bigger picture.

Citicorp's Chairman and CEO, John Reed, insists that all his executives understand the big picture. He wants them to present their strategies in a few slides to ensure that they fully understand and are able to inform their colleagues of the strategy and complete situation. Kim and Mauborgne's Strategy Canvas was devised along the same lines (53).

There are three complementary qualities that characterise an effective strategy (53)(49):

1. **Focus**
2. **Divergence**
3. **Compelling tagline**

These three qualities serve as an initial litmus test to see if an idea (especially a blue ocean idea) is commercially viable. These qualities must be clearly revealed in an organisation's strategy, otherwise it might be confusing and hard to communicate, and the organisation might have difficulty in distinguishing itself from its competitors.

Focus

Focus is the core of every great strategy, and an organisation's value curve must show this quite clearly (49). The organisation can't do and be all things to all people, but it needs to **do a few things very well**. An organisation must make an explicit choice about the focus area it is going to pursue and it should be as specific as possible. A focused strategy will also ensure that the organisation doesn't get distracted from the task at hand. When an organisation invests in numerous and diverse factors in their business, it shows a lack of focus. A lack of focus can lead to high cost-structures, and the implementation and execution of the business model will be complex.



Divergence

The strategy of an organisation must be **unique**, in other words different from the strategies of its competitors (49). Often the value curves of many organisations in an industry are similar and can be summarised by a single curve on the strategy canvas (49). This happens because organisations go head-to-head and try to beat each other in every aspect, often not considering whether real value is created for the customer. Organisations that follow value innovation must ensure that their curves diverge from the industry. They must figure out which factors don't add value to customers and reduce or eliminate them, and which factors can be increased to get better value (53). When an organisation lacks divergence, it will not stand apart from its competitors.

Compelling tagline

A tagline is a memorable phrase that sums up the tone of an organisation, product or brand. Kim and Mauborgne (53) say that every organisation must have a good tagline. They say that *"a good tagline must not only deliver a clear message but also advertise an offering truthfully, or else customers will lose trust and interest."* A strong strategy is generally accompanied by a compelling tagline. When an organisation lacks a tagline that attracts customers, it might indicate that the organisation is internally driven or that they might just innovate for the sake of innovating (49). This leaves the product with little commercial potential and a lack of natural take-off ability.

The strategy canvas is an analytical framework that can assist organisations increasing value innovation and blue oceans.

5.1.2 Strategy Canvas

There are many approaches and tools that are developed by academics and consultants that assist in the formation of a strategy.

The strategy canvas is an analytical framework that can support organisations with understanding their strategy and the big picture, while it can also help create blue oceans. The strategy canvas serves three main purposes (49,53):

- 1) It captures the state of the industry's position in the current market, while clearly showing which **factors the industry compete** on.
- 2) It shows where **current and potential competitors are investing** and what value customers receive from all the offerings in the market.
- 3) The **value curve** (strategic profile of the organisation) shows how the organisation invests in the factors of competition and where it might invest in the future to distinguish itself from competitors. It can help organisations understand where they can change their focus and diverge from their competitors' strategies, departing from the standard thinking of the industry to create blue oceans.

The value curve is a graphic description of an organisation's relative performance on the key competing factors of the industry. Conventional logic of most organisations show that the canvas tends to follow a basic shape as rivals try to improve their value by trying to beat the competition and offering a little more for a little less. Most organisations never challenge the shape of the curve (52).



The horizontal axis captures the different factors that an industry can compete on and invest in, while the vertical axis shows the level of value that customers receive on all the key competing factors (52). A low position on the vertical axis indicates that an organisation invests less and offers less in that specific factor, or in terms of price charges less (53).

Figure 14 shows an example of a strategy canvas. All three organisations are competing on the same factors of competition. They are competing for the same market segment and try to beat the competition.

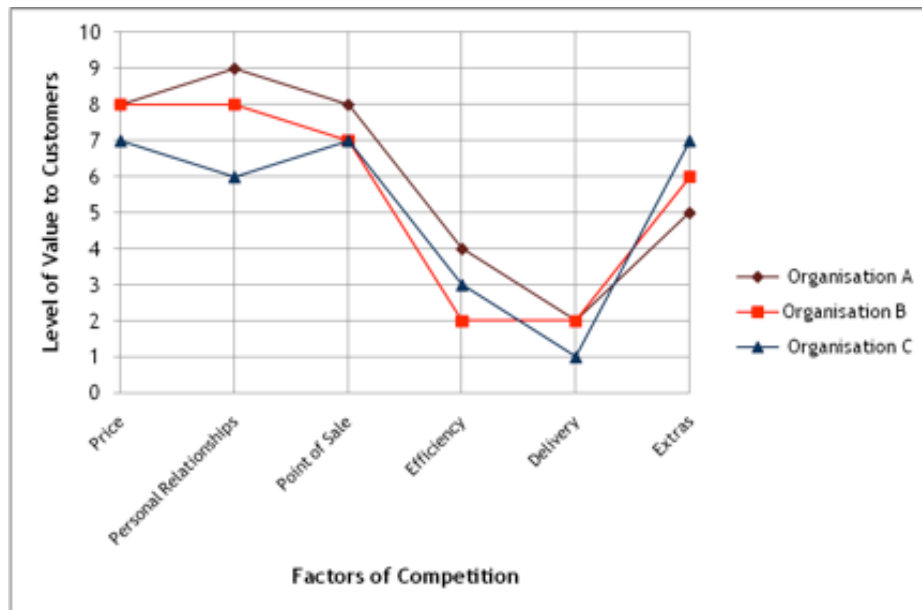


Figure 14: The Strategy Canvas (50)

To enter a blue ocean, organisations must fundamentally move their value curve from the industry standards. They must stop focusing on the competition and begin re-orienting their strategy from customers to **non-consumers** in the industry.

The Four Actions Framework will be applied to Organisation A to demonstrate how a Blue Ocean can be created. Figure 16 will demonstrate what the strategic canvas of a Blue Ocean Organisation looks like.

5.1.3 The Four Actions Framework

Kim and Mauborgne (49) created the Four Actions Framework to overcome the compromises that the industry forces customers to make. Cost savings are made by **eliminating** and **reducing** some feature that the industry takes for granted and which doesn't add value, and the value for the customer is increased by **raising** and **creating** elements that the industry has never offered before (49). The following four questions must be asked to challenge the logic of the industry and business model:

- Which of the factors that the industry takes for granted should be **eliminated**?
- Which factors should be **reduced** well below the industry's standard?
- Which factors should be **raised** well above the industry's standard?
- Which factors that the industry has never offered before should be **created**?



The first question will force an organisation to consider whether some of the factors that an industry has always offered and competed on, really deliver value to the customer. The second question forces an organisation to consider whether their offering has been overdesigned and given the customer features that they don't need and aren't willing to pay for. The third question will force organisations to understand what types of compromises the industry forces their customers to make, and will try to overcome them. Finally, the fourth question gives organisations a chance to break free from the boundaries that have been established by the industry and will help them to add new sources of value for their customer (52). The **Four Actions Framework** is a tool that can assist in the creation of Blue Oceans (49) and is presented in Figure 15.

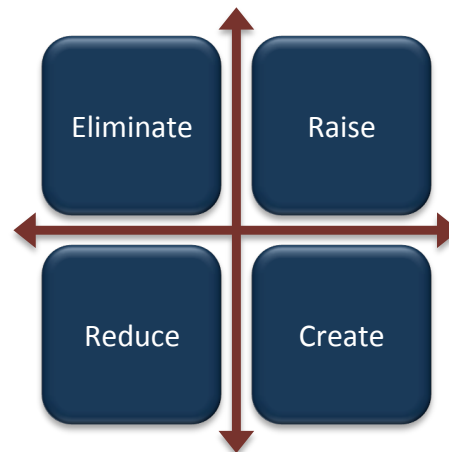


Figure 15: The Four Actions Framework (50)

Figure 16 shows a strategy canvas after an organisation has applied the Blue Ocean Strategy. Red Ocean Organisation A and B used conventional strategy. These two organisations compete head-on for the same market, while the Blue Ocean Organisation has differentiated itself from the competition: it has focus and offers its customers value (a compelling tagline). The Blue Ocean Strategy will distinguish an organisation from the rest of the industry.

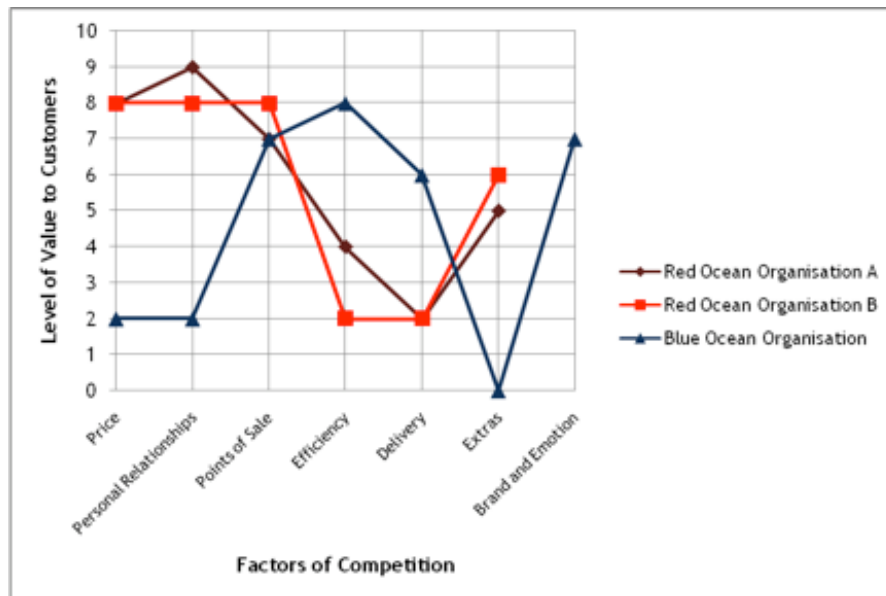


Figure 16: The Strategy Canvas after the Blue Ocean Strategy has been applied (50)

The Four Actions Framework was applied to the Blue Ocean Organisation and factors of competition were:

- Eliminated: Extras
- Reduced: Price and Personal Relationships
- Raised: Efficiency and Points of Sale
- Created: Brand and Emotion

Conventional strategic logic forces organisations to offer better solutions for existing problems, while value innovation looks at redefining the problem and overcoming the cost-value trade-off. Organisations must ensure that they don't offer their customer more than they need or are willing to pay for and hence must reduce or eliminate performance oversupply.

5.1.4 Performance Oversupply

When an organisation focuses on value without innovation, the net benefit of a customer will be improved on an incremental scale only (52). If an organisation only focuses on innovation, it can often happen that the organisation becomes too technology-driven and the offering's performance can overshoot the offering customers are ready to accept and pay for (49).

Performance oversupply happens when the rate at which certain technology improves is faster than what the customers need and hence this technological improvement creates a void in the low-end market with customers who don't need such amazing performance, but only use the product because they have no other choice. Therefore, when a simpler product enters the market, customers will tend to go for the simpler product. Christensen (28) says that 'performance oversupply' *"triggers a shift in the basis of competition, and the criteria used by customers to choose one product over another"*.



An example is:

Insulin, which is used to treat diabetes, is made of animal products, and the higher the purity of the insulin, the greater the competitive advantage of the organisation producing it. Eli Lilly made a great effort to get impurity down to 10ppm. Even with the great improvement in the purity of insulin, some diabetics built up resistance to the insulin in their immune system. In 1978, Eli Lilly invested \$1 billion to create 100% pure insulin. This product was priced at a premium of 25% to other products with more impurities; the response to this technically successful product was half-hearted and the sales were very slow. One researcher even commented that in retrospect they realised that customers weren't extremely dissatisfied with the 10ppm (parts per minute) impurity insulin. This is a good example of 'performance oversupply', because the product's performance exceeded the need of the customer. The mistake Eli Lilly made in their market research was that they only listened to their 'lead users'. Those physicians who treated the most advanced cases of diabetes and those customers who had built up a resistance to impure insulin (14) were the ones who wanted better quality insulin, but they were by far in the minority. The majority of insulin users were happy with the 10ppm impurity insulin.

Performance oversupply causes greater market segmentation, which shrinks the target market of an organisation, and the organisation leaves a large part of the market unprotected.

Technology innovation isn't a prerequisite of value innovation. Kim and Mauborgne (52) state that the high profit and steady growth that blue ocean organisations have experienced "*are not a consequence of daring young organisational members, of being in attractive industries, or of making big commitments in the latest technology. Instead, the super performing companies that we studied are united in their pursuit of innovation outside a conventional context. That is, they do not pursue innovation as technology, but as value*". Some of the greatest value creation has had nothing to do with technologies, and that is why they are called *value* innovations.

The tools and analytical frameworks that Kim and Mauborgne have introduced can be used in the six principles that they devised to formulate and create blue oceans.

5.2 The Six Principles of Blue Ocean Strategy

The Blue Ocean Strategy will always involve some risks and a way to maximise the blue ocean opportunities while incurring the minimum risk is to follow the six principles of Blue Ocean Strategy. These six principles are divided into four guiding principles for the formulation of Blue Ocean Strategies and two principles that drive effective execution of the Blue Ocean Strategy. The Six Principles are shown in Table 7 (49).



Table 7: Six Principles of Blue Ocean Strategy

Formulation Principles	Risk Factor that each Principle attenuates
Reconstruct Market Boundaries	<i>Search risk</i>
Focus on the big picture, not the numbers	<i>Planning risk</i>
Reach beyond existing demand	<i>Scale risk</i>
Get the strategic sequence right	<i>Business model risk</i>
Execution Principles	Risk Factor that each Principle attenuates
Overcome key organisational hurdles	<i>Organisational risk</i>
Build execution into strategy	<i>Management risk</i>

The Formulation principles will be used predominantly in this thesis, because the focus is more on the planning stage than on the implementation stage.

5.2.1 Principle 1: Reconstruct Market Boundaries

The first principle of the blue ocean strategy looks at the boundaries of an industry and how to break away from the competition while simultaneously creating blue oceans (49). Kim and Mauborgne have identified six basic approaches to redefine the boundaries called the **Six Paths Framework** that challenge six fundamental assumptions of the industry. They are (49):

- **Path 1: Look across alternative industries**
 - An organisation doesn't just compete with other products and services within its own industry, but also with organisations that produce alternative products and services.
 - **Substitutes** are products and services that have a different form but offer the same functionality and core utility. A substitute is anything that acts or serves in place of something else; it is a replacement. For example, one might choose McDonald's over KFC, but they both compete in the same industry. Or, similarly, one could choose to use a pencil instead of a computer accounting package.
 - **Alternatives** are products and services that have different functions and forms but fulfil the same function. Something is an alternative if it is available as another possibility, like going to the movies instead of going out for dinner. Both are entertainment options, but they represent two industries.
- **Path 2: Look across strategic groups within industries** (54)



- Strategic groups refer to companies within an industry that pursue similar strategies.
- Strategic groups are normally ranked based on two dimensions: price and performance.
- A leap in price is prone to bring about a corresponding leap in some dimension of performance.
- Organisations within a strategic group often have target markets, prices and performance. An organisation that wants to capture a blue ocean must break free from these strategic groups.
- **Path 3: Look across the chain of buyers**
 - An organisation must differentiate between the purchasers of the product or service and the actual users, the “influencers”.
 - Organisations must be aware that there is a chain of buyers directly or indirectly involved in buying the product.
- **Path 4: Look across complementary product and service offerings**
 - Organisations must examine what happens before, during and after the product is used in order to claim any untapped value that is hidden in complementary products and services.
 - Organisations must define the total solution buyers seek when choosing a specific product or service.
 - A relevant example would be the Checkers and Shoprite supermarkets. They both sell groceries, wine, electricity, airtime and bus tickets, and other tickets via the Computicket system.
- **Path 5: Look across functional or emotional appeal to buyers (54).**
 - Organisations tend to converge around two bases of appeal: functional appeal and emotional appeal. Some organisations are functionally oriented and compete primarily on price and utility. The appeal is rational. Other organisations compete on feelings and their appeal is emotional. These emotionally oriented industries offer extras that add price without adding functionality. Over time, industries that are emotionally oriented become even more so, and the same is true of functionally oriented industries, which become more functional. Kim and Mauborgne (49) argue that market research “*rarely reveals new insights into what customers want. Industries have trained customers into what to expect. When surveyed, they echo back: more of the same for less.*” New market space can often be pinpointed if organisations are willing to challenge their industries’ functional-emotional orientation.
- **Path 6: Looking across time (54)**
 - External trends have an influence on all industries. When organisations analyse these trends from the right perspective, they can unlock innovation that will create new market space. Organisations must try and form insights on how trends will change value for customers

Table 8 looks at the shift in focus of the strategy from head-to-head competition to the creation of new market space.



Table 8: Shifting the Focus of Strategy (54)

The Conventional Boundaries of Competition	Head-to-head competition	Creating new market space
Industry	Focuses on rivals within the industry	Looks across substitute and alternative industries
Strategic Group	Focuses on competitive position within its industry	Looks across strategic groups within its industry
Buyer Group	Focuses on better serving the buyer group	Redefines the buyer group of the industry
Scope of product and service offerings	Focuses on maximising the value of product and service offerings within the bounds of its industries	Looks across complementary product and service offerings that go beyond the bounds of its industry
Functional-emotional orientation of an industry	Focuses on improving price-performance in line with the functional-emotional orientation of its industry	Rethinks the functional-emotional orientation of its industry
Time	Focuses on adapting to external trends as they occur	Participates in shaping external trends over time

These paths must be explored and can be combined, adjusted or pulled apart to find a blue ocean. It is also very important that an organisation is familiar with the big picture.

5.2.2 Principle 2: Focus on the Big Picture, not the Numbers

The identification of the key factors of competition can often be a difficult task, because different managers in an organisation have different ideas of what is important. Kim and Mauborgne (49,53) developed a structured process for discussing and drawing up strategy canvases that can assist in the creation of distinct and communicable strategies. The four steps are as follows:



Figure 17: Structured process for drawing up and discussing a strategy canvas

Step 1: Visual Awakening

How can the need for change be conveyed? A mistake is commonly made when executives start discussing changes to their strategies before some differences in opinion are resolved about the current



state of the organisation. Also, they differ on what the key competitive factors of the industry are. Kim and Mauborgne (53) have found that when executives go through the process of drawing up their organisation's value curve, the need for change will be highlighted.

Once an organisation has managed to agree on the key competitive factors of the industry, it can draw up the value curve of the organisation's strategy. Only then can the organisation move onto the next step in the process.

Step 2: Visual Exploration

When an organisation has realised that there is a need for change, it must devise its new strategy. Visual exploration is the next step of devising a blue ocean strategy and a team must be sent into the field where the managers must make sense of how people actually use their products (53). The biggest problem is that managers often **outsource** this step of the strategy-making process. What they don't realise is that they consequently rely on the understanding and interpretation of others. The document that the managers get back will have been put together by other people, and managers are often one or two times removed from the actual world (53). Managers must go and see for themselves, to really drive home the need and understanding! To get a good strategic insight of the organisation and its potential, managers must get into the field. The BoP is a very misunderstood market, and an organisation that wishes to target this population must immerse itself in that market.

The organisations can't just research their target markets; they need to completely immerse themselves in the lives of their customers. The Bottom of the Pyramid population has (25)

"tough challenges in access, awareness, affordability, and availability, and only those grounded in the reality of their consumers' lives will understand their priorities. The consumers themselves may not have the ability to articulate their needs."

Firstly, the organisation must study and analyse its customers. The organisation must see how they use a product, what they like and what they struggle with. That's merely the beginning of market research. After the customers have been targeted, the organisation must go after the competitor's customers, customers that have been lost, and those people who have never used the products or services: the noncustomers (53). When the users of a product or service aren't the same as the customers, an organisation must also study the users.

The approach that an organisation must follow is to not only talk to the BoP, but also to observe how they use the product. Some of the following approaches are suggested by Kim and Mauborgne (49,53):

1. Talk to customers and noncustomers
2. Interview and observe
3. Reach outside the industry's traditional boundaries
4. Interview end-users
5. Look at complementary services and products

After the field research has been carried out, managers are sent back to the drawing board where they have to devise a new strategy.



Step 3: Visual Strategy Fair

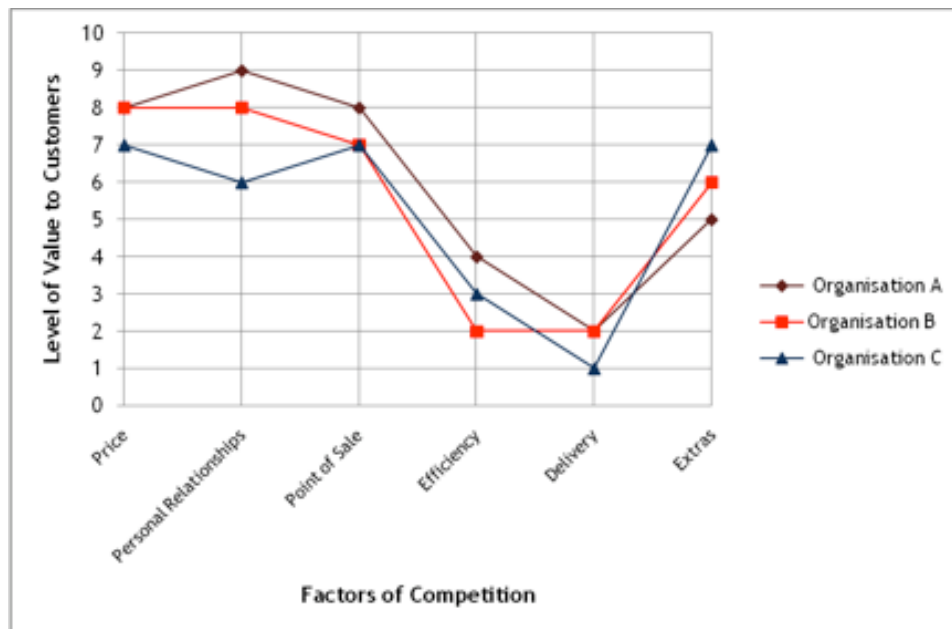
After all the managers have drawn up new strategies, they have to present their strategy in ten minutes. The idea behind this approach is that any strategy that takes longer than ten minutes to explain is too complicated (49). This is the strategy fair where all managers put their strategies on display. Managers will have to fully rely on the clarity and the freshness of their strategy curves and pitches. Then, a panel of judges, including customers, noncustomers and end-users, will review them. With the feedback of the judges and further brainstorming and discussion, a new strategy is devised and a new strategy canvas is drawn up. The last step is to communicate the new strategy to the employees and stakeholders.

Step 4: Visual Communication

Properly communicating the new strategy to all stakeholders is essential to ensure buy-in. The Managers must walk their direct reports through the new strategy to ensure that it is well understood. A comparison of the old and new strategy profiles must be visually displayed on a single page (Figure 18), so that all employees can see where the organisation was and where it is going (53). The new strategy and picture must become a reference point for the decisions that have to be made concerning all new investments. Only the ideas that actually support the new strategy must be implemented.



Old Strategy



New Strategy

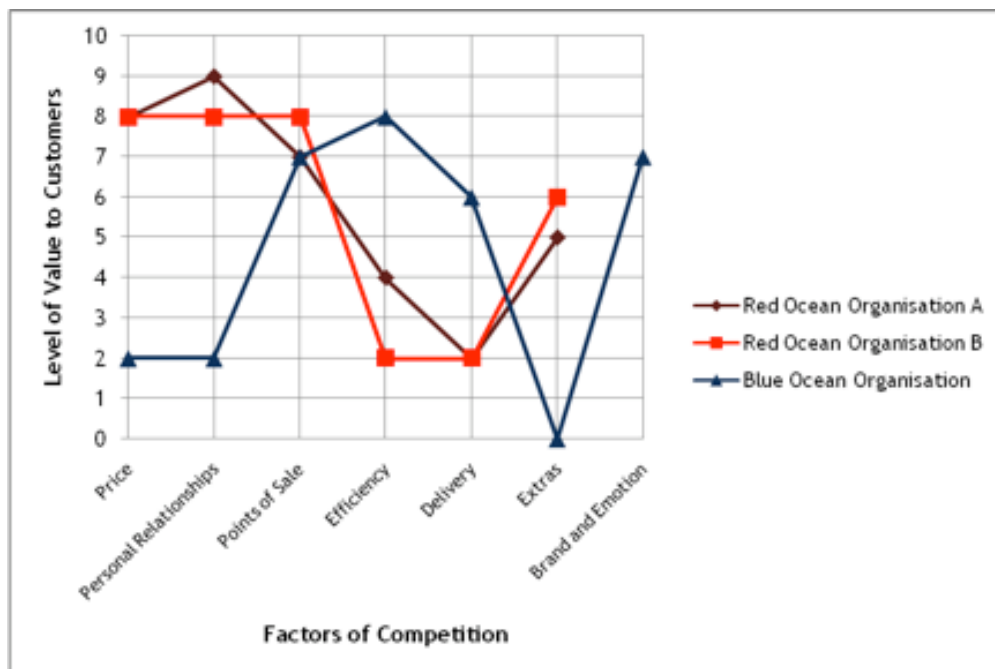


Figure 18: The old and new strategy visually displayed on a single page



The strategy canvas helps organisations to see and understand the bigger picture. At some point of the strategic planning process, numbers and documents must be included and drawn up (53).

When organisations have drawn up their new strategies, they must figure out how to reach the most customers.

5.2.3 Principle 3: Reach Beyond Existing Demand

Organisations need to be aware that there are different types of users in the marketplace. Christensen, Anthony and Roth (55) identify three types of customers:

- The undershot customer
- The overshot customer
- The non-consumer

Undershot customer

The first type of customer is the **undershot customer** (lead users). These are the customers who find that the existing products are not good enough, and don't completely fulfil their needs. It often leaves them frustrated with the lack of sophistication and performance (55). These customers are typically interested in and follow new technologies, and always buy better, more advanced products. Organisations have always looked towards their lead users (undershot customers) for new ideas and improvements. Lead users want better performance in their products and services at higher prices, and often they only reflect a small part of the market segment. These users are already the organisation's best customers and they are showered with attention.

Often organisations innovate at a faster pace than its customers' lives change. This causes products to be produced that are too expensive and too complicated for the customer (See performance oversupply Chapter 5.1.4). The problem is that managers are trained to always seek higher profits by bringing superior products into the marketplace that normally only fulfil the needs of the undershot customers (55). And as products improve, overshot customers will appear.

Overshot customer

The **overshot customers** are the customers for whom existing products are too expensive, too complicated or just too much effort to use. The constraints for these customers are typically: price, convenience, complexity and usability (55). They normally use those products out of necessity, because they have no other options available to them. An example of an overshot customer is one who has a cellular phone that has too many applications, is expensive, and either leaves the customer frustrated with the complexity of the device.

These overshot customers use the products out of necessity and are also the least loyal customers, easily moving to another brand or product if they are unhappy. Therefore, it is important that an organisation does not neglect them, because otherwise the organisation risks losing them. These unhappy customers are targets for new products and organisations that are looking for gaps in the market.



Non-consumers

Then there are the **non-consumers**. These consumers lack the skills, wealth or ability to '*do it themselves*'. They are often underserved or completely ignored as a market. Organisations often don't realise that production of simpler, cheaper products can enable them to connect with a whole new market segment (55). Nintendo is a good example of an organisation that actively pursued non-consumers (This example is not a BoP example, but it does explain the concept of a non-consumer).

The Nintendo Wii is a video game that doesn't go for the typical gamer market. Nintendo don't focus on sharper graphics, better sound or more complex interfaces, but try to make the games easier, simpler and more accessible. It opens up opportunities to attract gamers, who historically would never have been interested or skilled to play games. In this way, they attracted weight-conscious women (Balance Board – yoga, etc.), the baby-boomers (Brain Age – counteracts the effect of ageing on mental sharpness) and because of the simplicity of the controls, even very young children can play the games. The Wii is easy to use and doesn't require a long learning curve (56).

By figuring out why non-consumers are not active users, organisations can come up with ways to capture new markets. They are also an ideal initial target for new organisations entering the market, because these markets are ignored by established organisations and therefore don't create direct competition. These markets can also be used as a learning curve to get the product right.

South African examples of organisations that have targeted non-consumers are **Cover2go** by Metropolitan, an organisation that brought out insurance products aimed at the low-income, previously uninsured population. The products are affordable and easy to understand with no hidden costs. Another example is **Capitec Bank**, which provides simple, affordable and accessible core banking to the previously unbanked population of South Africa. Both these organisations targeted the non-consumers, created new exciting markets (blue oceans) and captured market share.

The Blue Ocean Strategy has identified three types of non-consumers. In order to reach beyond existing demand and create more demand, organisations need to consider the *Three Tiers of Noncustomers*³.

The Three Tiers of Noncustomers

Noncustomers offer huge blue ocean opportunities, but many organisations lack the insight and knowledge to actually figure out who they are and target them successfully. In order to convert the latent demand of the noncustomer into real demand in the form of new customers, it is important that an organisation deeply understand them (49). Figure 19 shows the three tiers of non-consumers. The organisation's target market is on the edge of the non-consumers, and they must try to expand into this market.

³ The Blue Ocean Strategy uses the term **noncustomer**, but for the purpose of this thesis, the term **non-consumers** (derived from Christensen's work (55)) will be used. The two terms mean exactly the same.

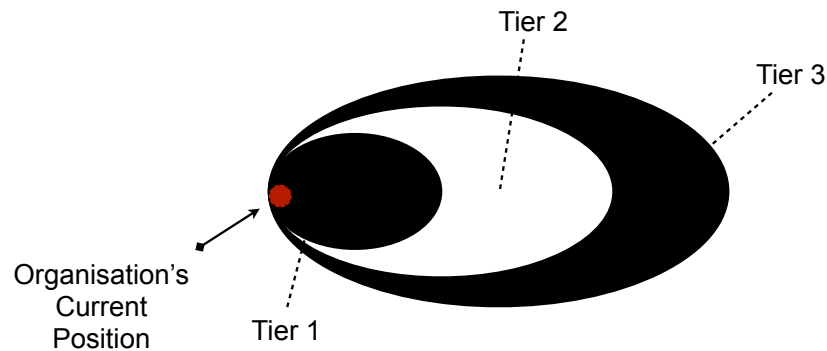


Figure 19: The three tiers of noncustomers

There are three tiers of noncustomers who have the possibility of becoming customers. **Tier 1** consists of those people who only use the organisation's offering out of necessity and will "jump ship" at any opportunity they get. These are also known as the overshoot customers. When a new, different offering arrives that gives a leap in value, they will not think twice when going for this offering, and the frequency of their purchases will multiply. In the first tier, the noncustomers sit on the edge of the market, ready to pursue any alternatives.

Tier 2 consists of those people who refuse to use the industry's offering (49). These noncustomers have consciously voted against using the industry's offering as an option to fulfil needs. They prefer to use alternatives. **Tier 3** of noncustomers is made up of those people who have never even considered the industry's offering as an option to fulfil their needs. They are situated the farthest from your current market (49). Organisations must focus on the key **commonalities** that their customers and noncustomers present to get a better idea of how they can be pulled into the new market.

Blue ocean strategy creates new demand where there previously was none. This means they basically start serving **non-consumers**.

To ensure that an organisation achieves the greatest demand for their offering, they must challenge two conventional strategy practices (49):

- Focus on **existing customers** (overshot and undershot).
- Drive for finer segmentation to accommodate **buyer differences**. Organisations try to expand and retain their existing customers to ensure a growth in their target market. By constantly tailoring offers to accommodate lead customer preferences and embracing finer customer segmentation, they can often risk creating target markets that are too small.

To ensure that the greatest demand is created, organisations must reverse some of their views on strategy. Organisations need to look at non-consumers and try to figure out why they don't use the offering. Instead of focusing on the differences of customers, organisations must consider what they have in common and build on these powerful **commonalities**. Organisations must figure out why non-consumers are not using their products.

The Bottom of the Pyramid population can often be considered as non-consumers



5.2.4 Principle 4: Get the Strategic Sequence right

For value innovation to occur, organisations must align innovations with the **utility of the offering, and price and cost positions**. Organisations must develop an understanding of which ideas have commercial value. Innovation is a difficult challenge that even the best organisations can get wrong because they introduce the product either at the wrong time or at a price that most customers can't afford. A new product must offer customers added value and outstanding utility at a price that is affordable to them while the organisation makes a good profit (57). Many managers have trouble evaluating the readiness of a new idea and objectively assessing its potential.

Kim and Mauborgne (49,57) discuss a specific strategic sequence that organisations must follow in order to validate their ideas for commercial success. By following this sequence, they claim that some of the business model risk can be reduced. This sequence also allows organisations to test whether their offering is commercially viable before investing too much money in it. The sequence is utility, price, cost and adoption and is reproduced in Figure 20.



Figure 20: The Strategic Sequence

Kim and Mauborgne (49,57) developed analytic tools that will assist managers in identifying a winning idea. The tools are the Buyer Utility Map and the Price Corridor of the Mass (PCM) (57), which will be discussed in the following sections.

1) Creating Exceptional Utility

The first step in getting the strategic sequence right is making sure that the product offers exceptional utility. This step evaluates the likelihood that customers and noncustomers will be attracted to the new idea. Successful value innovators understand that *“how a product is developed becomes less a function of its technological possibilities and more a function of its utility to customers”* (57). The Buyer Utility Map helps managers understand the different levels and phases where they can improve utility and value.

The Six Stages of the Buyer Experience Cycle

Kim and Mauborgne (57) state that there are six stages in the buyer experience cycle. Each stage includes a range of specific buyer experiences and is shown in Figure 21:



Figure 21: The steps in the buyer experience



To ensure that an organisation can improve the buying experience of its buyers, it must answer the questions in Table 9 at each step of the buyer experience.

Table 9: The buyer experience cycle (57)

Purchase	Delivery	Use	Supplements	Maintenance	Disposal
How long does it take to find the product you need?	How long does it take to get the product delivered?	Does the product require training or expert assistance?	Do you need other products and services to make this product work?	Does the product require external maintenance?	Does the use of the product create waste items?
Is the place of purchase attractive and accessible?	How difficult is it to unpack and install the product?	Is the product easy to store when not in use?	If so, how costly are they?	How easy is it to maintain and upgrade this product?	How easy is it to dispose of the product?
How secure is the transaction environment?		How effective are the product's features and functions?			
How rapidly can you make a purchase?					

The Six Utility Levers

Kim and Mauborgne (57) say that there are levers of utility that cut across the stages of buyer utility. These utility levers are ways in which organisations can unlock value for their customers. To ensure great utility, an organisation must ensure that the greatest blocks to utility are removed (57,57,57) from the whole buyer experience cycle. The utility levers are (49,57):

- Customer productivity
- Simplicity
- Convenience
- Risk
- Fun and image
- Environmental friendliness

By combining the stages of buyer experience and the utility levers, the **Buyer Utility Map** is created which is shown in Table 10.



Table 10: The Buyer Utility Map (57)

The Six Stages of Buyer Utility

The Six Utility Levers	Purchase	Delivery	Use	Supplements	Maintenance	Disposal
	Customer Productivity					
	Simplicity					
	Convenience					
	Risk					
	Fun and Image					
	Environmental Friendliness					

The productivity of a customer can be improved by innovations that make any activity better, faster and more convenient(57). The buyer utility map consists of 36 spaces, and by locating a new product in one of them, managers can see whether the new idea will create a different value proposition from all the products that are already available (57). Managers often try to give more of the same utility at the same stage to their customers.

Successful innovators stake out new spaces on the map in one of three ways (57):

- Using a new utility lever at the same stage:
 - Successful innovators must create new expectations and added value for the same and familiar experiences.
 - An example is when an organisation that is currently focused on customer productivity in the use stage changes the offering to make the life of its users more fun, and gives them a better image. Then the organisation is using a new utility lever at the same time.
- Using the same utility lever in a new stage:
 - Successful innovators must extend familiar utilities to different stages of the customer experience and services.



- This occurs when, for example, an organisation that offers great convenience in the use stage makes the life of the user more convenient in the purchase stage by opening new branches and having longer office hours.
- 3. Using a new utility at a new stage:
 - Successful innovators must try to do something completely new by increasing or adding a utility in another stage.
 - This occurs when an organisation makes its product, which was previously damaging the environment on disposal, more environmentally friendly when it needs to be disposed of. In this way, the organisation adds a new utility at a new stage and can even try to make the whole disposal simpler and more convenient by adding utility to the product.

An organisation must figure out where the greatest utility drawbacks are across the different stages for all the customers and the noncustomers, and overcome them. The buyer utility map can help an organisation establish whether an idea is a genuine innovation, or simply increases utility without adding value for the consumer. It can also remind executives of how many innovative ideas there are that have been left unexplored (57). So the question an organisation must ask itself is: *How many spaces in the utility map does the organisation occupy?*

2) Setting the Strategic Price

To ensure that an organisation realises a healthy revenue, it has to set its strategic price right to attract the general public (49). Often organisations want to first ‘test the waters’ by targeting those customers who seek new products and are not very sensitive to price. They will launch their products at a high price and then decrease it over time to attract the mass of the customers (57). Kim and Mauborgne (49) argue that from the very start organisations must price their product to capture the mass of the market. It is important that organisations determine the price that will allow them to capture a large pool of customers quickly. The two reasons why this approach has become so critical are:

- Volume generates higher revenues than it used to.
 - *“As the nature of goods becomes more knowledge intensive, companies bear much more of their costs in product development than in manufacturing. So once the development costs have been covered, sales fall straight to the bottom line”* (57).
 - For example, Microsoft spent millions on developing the Windows 95 operating system; whereas all the ensuing copies sold cost them slightly more than the CD, packaging and distribution (57). Therefore, the more operating systems Microsoft sells, the higher the percentage profit they make.
- Network externalities
 - Some organisations have to seize the mass market early, because the value of their product is closely tied to the number of users that use it.
 - The more customers use the eBay website, the easier it is to buy and sell goods, and the more customers will join (57).

The price an organisation chooses must not only attract the mass market, but also assist the organisation in retaining them. Kim and Mauborgne (57) call this the **pricing strategy**. Many organisations are very vulnerable to imitations and free-riding. Customers must be convinced that they are receiving the best value at the best price in order to remain loyal. Therefore, organisations must offer the customers something they can’t resist.



Imitations and Excludability

Two of the major inputs of value innovation are knowledge and ideas. This kind of approach has two important consequences (52):

- There is a potential for increasing returns as volume increases.
- Knowledge and ideas can create potential free-riders.

Imitation is a reality when knowledge and ideas are involved, because the value innovator bears all the costs and risks in developing the new idea, while the follower can learn from their mistakes (52). Knowledge and ideas can't be patented, so followers can apply the ideas and knowledge to their own organisation without legal ramifications.

An organisation must also consider the excludability of an offering, which is a function of the legal system and the nature of the good. An offering is "*excludable if the company can prevent others from using it due to, for example, limited access or patent protection*" (52). So, the problem is that once ideas become known, other organisations have every right to use them. When an offering lacks excludability, free-riding becomes more common.

It is therefore very important that when organisations come up with new ideas and offerings that are non-excludable and easy to imitate, they ensure that it is very difficult for competitors to free-ride. Kim and Mauborgne (52) argue that when there is "*potential of economies of scale, learning and increasing returns, the importance of volume, price and cost grows in unprecedented ways.*" Organisations must plan to capture the mass market early and quickly expand the size of the market. By offering value that is superior at price points that is accessible to the mass market. In order to get the full advantage of capturing the market quickly, organisations must not try to maximise their profits using conventional practices like setting high prices and charging a premium. This would prohibit the mass of customers from being able to afford the product. These customers might have wanted and needed the product, but due to the high prices the product just wasn't an option. High prices, which lead to low volumes, can prevent an organisation from reaping the benefits of economies of scale and learning.

Kim and Mauborgne (52) propose that the value innovator strategically price the product from the beginning to ensure that the mass of buyers is captured. This will give an organisation the advantage that the strategic price and rapid brand recognition built by the organisation will discourage imitators and make the competition almost irrelevant. Catching up with the economies of scale and learning advantages will become very hard for competitors.

Therefore, the strategic focus moves from charging high prices to creating a larger demand. It is then in the organisation's best interest to reduce costs as much as possible.

To ensure that profits are maximised, a value innovator must focus on capturing the mass of the buyers, even if they might lose some of their existing clients. The existing clients must be monitored, but it is essential that an organisation closely follow non-consumers to obtain deep insights into trends and changes (52).

The Price Corridor of the Mass is a very helpful tool to determine an appropriate price.



The Price Corridor of the Mass

Kim and Mauborgne (57) came up with a tool that assists organisations in finding the right price for a compelling offering. They called it the **Price Corridor of the Mass (PCM)** and it consists of two steps:

Step 1: Identifying the Price Corridor of the Mass. Firstly, organisations must look at substitute and alternative products and services that closely resemble their product (57). One of the main challenges that an organisation faces in determining the best strategic price is to understand that people will compare the organisation's product with competitors' products and services as well as a host of different products and services that fulfil the same need (57) – products from those organisations whose products are outside the traditional industry. There are three categories in which an organisation must search to identify more potential customers:

1. Same form
 - Direct competitors within an industry
2. Different form, same function
 - Some products have a completely different physical form, but still fulfil the core need of the customer.
 - The product might look different, but it still has the same function of the organisation's product.
3. Different form and function, same objective
 - This may be an alternative to what the organisation currently offers, which can be used as a replacement.
 - This product might be completely different to what an organisation is offering, but it might still fulfil the same need.

The **PCM** is a tool where the organisation plots the price and volume of alternatives and substitutes lie. They can then identify where the largest volumes of customers are currently situated and what prices they are willing to pay. This creates a band that captures the largest group of potential customers, and it is called the PCM (57)

Step 2: Specifying a level within the price corridor. In this step, organisations must decide how high they can set the price within the Price Corridor of the Mass, while still discouraging competitors and free-riders who want to imitate the products and services (57). Organisations must consider how excludable their offering is. If the offering has high patent protection or is difficult to imitate, the organisation can set their prices at the higher end of the price corridor. If, however, the offering has no legal protection, core capabilities, an established brand name or exclusive assets to protect against imitation, an organisation should pursue a pricing strategy that lies in the medium to lower range of the price corridor.

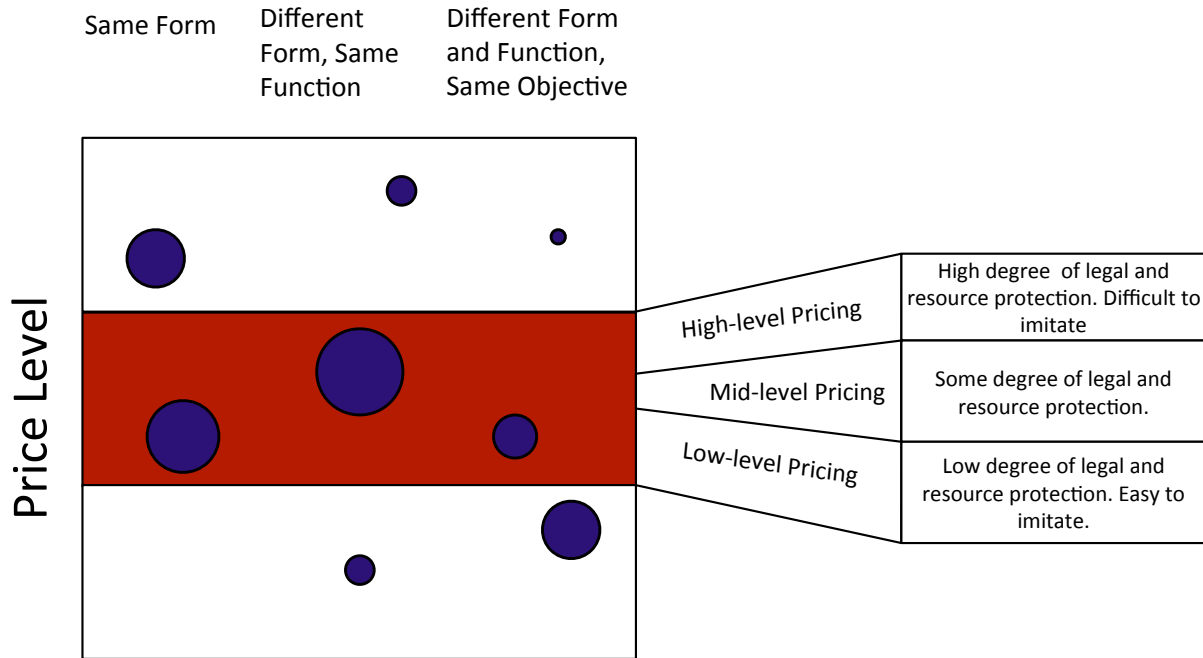


Figure 22: The Price Corridor of the Mass (49)

Organisations would be wise to set the strategic price near the lower boundary of the price corridor if (49):

1. The product of the organisation has high fixed costs and marginal or low variable costs.
2. The attractiveness of the offering heavily depends on network externalities.
3. The cost structure of the organisation can benefit from large economies of scale and scope. In these cases, large volumes can bring cost advantages, which make pricing for volume very important.

Setting the right strategic price has many implications for an organisation. If they don't take immediate advantage of the economies of scale and capturing the mass of the market, competitors might just slip in and capture all the benefits. The strategic pricing addresses the revenue building block of the business model. To ensure that an organisation still makes a healthy profit while selling their products at a price that the BoP can afford, they need to ensure that their costs are low.

3) Target Costing

Reaching the target costs will ensure that an organisation will make sufficient profits. When the price of a product allows an organisation to attract a large section of the general public. Hitting a low target cost addresses the profit building block of the business model (49). Kim and Mauborgne (49) propose an approach to costing that goes against conventional wisdom. They say that an organisation must set the price and then subtract the profit to arrive at the target cost. Conventionally, organisations determined the cost of an offering, added the desired profit and got the price. Kim and Mauborgne (49) say *“to maximize the profit potential of a blue ocean idea, a company should start with the strategic price and then deduct its desired profit margin from its price to arrive at the target cost”*. This is absolutely essential to ensure that the cost structure is profitable and difficult to imitate.



When the strategy of an organisation has focus, it will often reduce unnecessary costs. A cost structure that is driven by strategic pricing must be aggressive and the business model must be lean and profitable from the beginning (57). Value Innovators know that a good business model with a low cost structure is very difficult to imitate. Kim and Mauborgne (57) argue that when value innovators are basing *“their cost targets on the market-driven strategic price and refusing to allow overruns, they force their organisation to question virtually every assumption about materials, design, and manufacturing – often with surprising results”*.

Cost reductions are an absolute necessity, and sometimes they are enough to reach the cost targets. But often this is not the case. An organisation must find creative ways to meet the target cost. Kim and Mauborgne (49) show that organisations have three principle levers that they can use to hit their cost targets:

1. Streamlining and cost innovations
2. Partnering
3. Pricing model

Streamlining and Cost Innovations

The first lever questions all the assumptions from manufacturing to distribution. An organisation must consider if their operations can be streamlined and cost innovations can be introduced. Typical questions that can be asked to challenge assumptions are (49):

1. Can the product or service's raw materials be replaced by unconventional, less expensive ones?
2. Can high-cost, low-value-added activities in the value chain be significantly eliminated, reduced or outsourced?
3. Can the physical location of the product or service be shifted from prime real estate locations to lower-cost locations?
4. Can the number of parts or steps used in production be truncated by shifting the way things are made? Can activities be digitised to reduce costs?

Many organisations try to do all the manufacturing and distribution activities themselves. This can cause time delays and Kim and Mauborgne (57) state: *“Time works against the innovator in favour of the imitator”*. Organisations must realise that they aren't the best at everything and must rather look outside to organisations that can fill the gaps that exist in their capabilities. Certain capabilities can be secured quickly and effectively through collaboration.

If the streamlining cost innovations and partnering that an organisation dedicated itself to doesn't completely reach the target cost, the organisation should look at the pricing model of their industry to ensure that more customers are reached.

Pricing Model

Organisations can try to redesign their value chain, all their operations and partnerships, and still not reach their cost target. It might be that these organisations have assumptions about how products or services are priced. Questions an organisation needs to answer are as follows (57):

- Is their industry's pricing model a barrier to the business idea's success?



- Is there a pricing model – direct selling, leasing, time-sharing, slice-sharing, or equity payment – that would increase the profit pool?

The aim of changing the pricing model is not to jeopardise the strategic price but to reach the target costs. When an organisation has hit the target cost, they need to ensure that all the stakeholders buy in.

4) Overcoming Adoption Hurdles

Innovation brings about change, and this can threaten life, as it is known for the three most important stakeholders of the organisation: the employees, the partners and the general public. It is important that open and transparent discussions of the changes be made. The way to overcome most fears, including innovation, is to ensure that the fearful are educated (57).

Many uncertainties exist around innovation, but by following Kim and Mauborgne's framework for the strategic sequence, the vagueness and insecurities can be significantly reduced. If a new blue ocean idea passes the evaluation of the tools given, managers can be rather confident that the idea is viable (57). The framework also assists organisations in drawing up a coherent strategy.

The implementation risks that an organisation wishing to enter the BoP market might face are as follows:

5.2.5 Principle 5: Overcome Key Organisational Hurdles

Once a blue ocean strategy has been formulated and a profitable business model has been devised, an organisation must execute and implement it. Execution is a difficult challenge for any organisation and especially because key organisational hurdles exist. These are (49):

- **Cognitive hurdles:** Waking employees up to the need for a strategic shift.
- **Resource hurdles:** As strategies change, the resource needs of the organisation also change (limited resources) and this can create challenges in an organisation.
- **Motivational hurdles:** The employees and other stakeholders must be motivated to carry out the new strategy.
- **Political hurdles:** Organisational politics is a reality in every business and there are many stakeholders that will resist change to protect their position.

Kim and Mauborgne (49) claim that by applying tipping point leadership, many of these hurdles can be overcome. Tipping point leadership shows that elementary, deep changes can happen quickly, when the mass of employees believes in the idea and move towards it. It is based on the fact that in every organisation, people, acts and activities can lead to a disproportionate influence of the performance in an organisation. The disproportionate influences can be overcome by "*conserving resources and cutting time by focusing on identifying and then leveraging disproportionate influences in an organisation*" (49). Tipping point leadership can help overcome the hurdles and move the organisation from planning to execution.



5.2.6 Principle 6: Build Execution into Strategy

An organisation consists of everyone from the top management down to all the employees on the shop floor. Therefore, organisations must ensure that all employees understand and support the strategy to ensure success. A culture of trust and commitment must be created to ensure that the agreed strategy is executed. Kim and Mauborgne (49) argue that poor processes cause employees to lose faith in the organisation. They believe that a fair process affects employees' attitudes and behaviours. The three mutually reinforcing elements that define fair process are (49):

1. **Engagement:** Involving individuals to give input into those decisions that affect them.
2. **Explanation:** All individuals must understand why certain strategies are implemented.
3. **Expectation Clarity:** The new rules of the game must be clearly stated by the managers after a new strategy is set.

When employees feel like they are treated fairly, their buy-in is higher and they will cooperate more voluntarily. The employees feel like they matter because their input and views were considered. When employees are committed and cooperate voluntarily they become an intangible asset for the organisation.

5.3 Blue Oceans and the BoP

The BoP is often ignored and neglected by organisations that prefer to target the middle- and upper-class niche markets that are known. Thus, the BoP can be considered non-consumers. Non-consumers are currently not directly targeted by business. Therefore, the part of the BoP that are non-consumers can be considered a possible blue ocean.

Value Innovation is very important to the BoP, because of the constraints they experience. When organisations want to expand into the BoP, they must apply Value Innovation and Blue Ocean Strategy principles to ensure that they can offer products of great value at a low cost.

The principles of Blue Ocean Strategy can also be used to solve the problem that was presented in this thesis by allowing an organisation to make a profit, while not compromising social equity and environmental quality. They can improve social equity by considering the BoP as a blue ocean, and there is a new trend towards "green design", which can increase environmental quality and even bring down resource costs.

5.4 Chapter Summary

The focus of this chapter was on the Blue Ocean Strategy and how organisations can create value and demand in a saturated market.

Value Innovation is a concept that goes against conventional wisdom, which states that an organisation must simultaneously pursue low-cost and value. The six principles give organisations a strategy on how to create blue oceans.

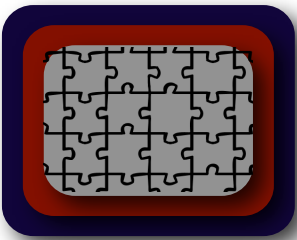
Any population segment not actively targeted by business is made up of non-consumers. Non-consumers can present blue ocean opportunities. Hence, when an organisation wants to target non-consumers, the BoP, some of the Blue Ocean Strategy principles, tools and analytical frameworks can be applied.



The Blue Ocean Strategy can be a useful concept for organisations that want to enter completely new, unknown market space.



The Business Model Development Strategy



This chapter will show how the Business Model Development Strategy (BMDS) is assembled. The BMDS is a systematic approach to design a business model, while also allowing the organisation to test it at various stages to ensure that it fulfils the core requirements of the BoP. The aim of the BMDS is to ensure that an organisation makes a profit, while promoting social equity and environmental quality.



6 The Business Model Development Strategy

The Business Model Development Strategy is developed using the principles of Sustainable Development, Business Models, Blue Ocean Strategy and CK Prahalad's work on the BoP (especially the Innovation Sandbox).

In this chapter a quick review will be given of the four main literature components that are used in this thesis. Then the literature will be connected by finding commonalities in the work. First, the business model and Blue Ocean Strategy are amalgamated. Then an order is created combining this new structure with Kim and Mauborgne's strategic sequence and the BoP literature. Next, the testing of the business model design is considered to ensure that the risk of failure is minimised.

The Business Model Development Strategy is then presented and its components are briefly discussed. Lastly, the Innovation Sandbox Process, which helps an organisation conceptualise information and develop the components of the Business Model Development Strategy, is discussed. Figure 23 shows the chapter sequence, from having the different literature to assembling the Business Model Development Strategy.

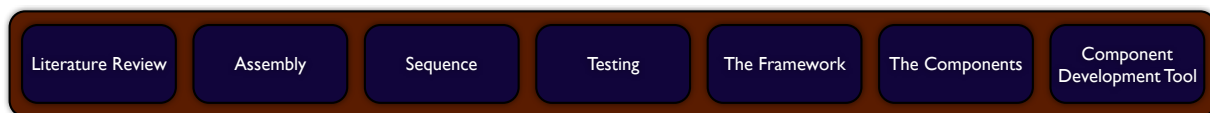


Figure 23: The structure and order of Chapter 6

The Business Model Development Strategy helps organisations that are currently targeting high-end markets and struggling to successfully expand into the **Bottom of the Pyramid (BoP)** market, while simultaneously promoting social equity and environmental quality.



6.1 Theories and Methodologies

Literature Review

The Business Model Development Strategy is assembled from the principles of four main theories and methodologies. The structure of the Business Model Canvas, which is a tool for business model design (11), is used and combined with the Blue Ocean Strategy, BoP literature and Sustainable Development principles to form a framework. CK Prahalad's work on the BoP assists the organisation in understanding the BoP. A quick overview of the four main theories are given in Figure 24:

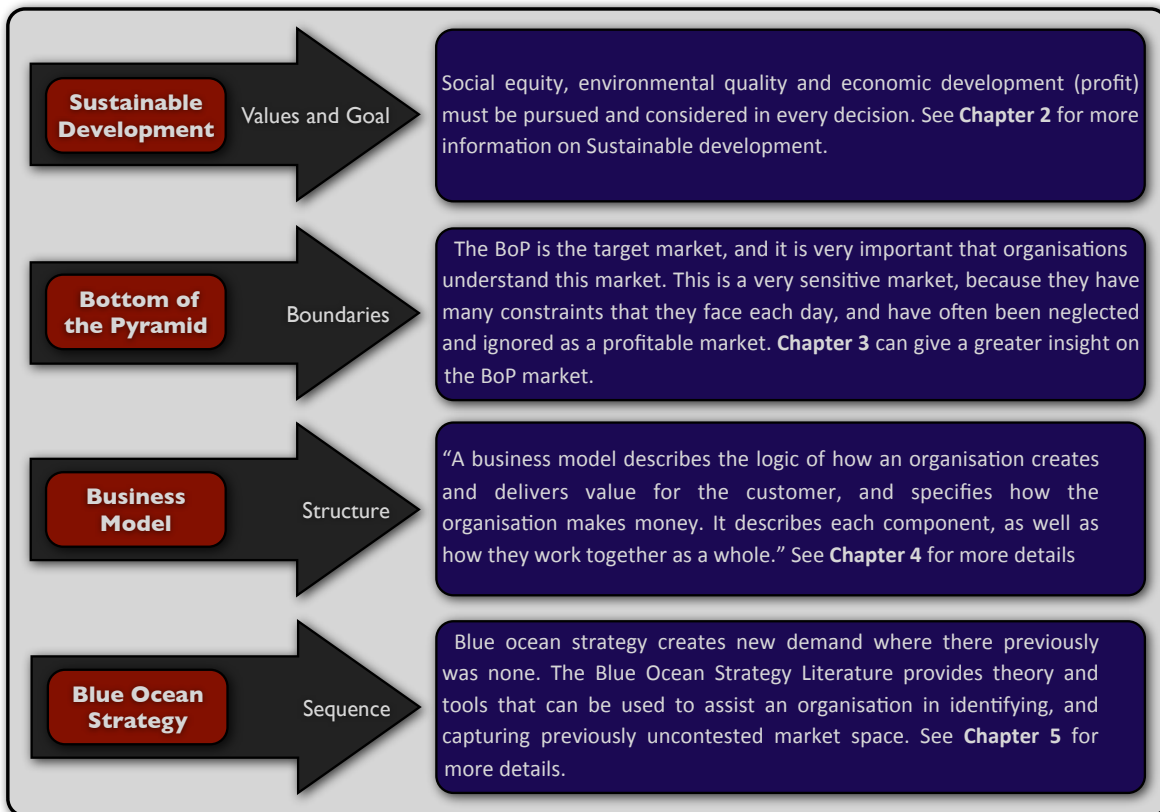
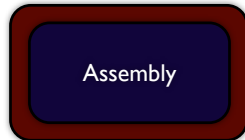


Figure 24: The Theories and Methodologies that are used to assemble the Business Model Development Strategy

Each of these four theories/methodologies plays a role in the assembly of the Business Model Development Strategy. Sustainable Development provides the goal an organisation must work towards, as well as the values an organisation must have to encourage socially responsible behaviour. The BoP is the target market and it plays a big role in the structuring of the business model. The Business Model Canvas tool provides the structure and components that will be used in the Business Model Development Strategy, while the Blue Ocean Strategy provides tools, theory and a sequence to design the business model. The role that these theories and methodologies play in the assembly of the Business Model Development Strategy is discussed next.



6.2 Connecting Sustainable Development, the BoP, Blue Ocean Strategy and Business Models



This thesis addresses the problem an organisation faces when it has to target the BoP. The organisation must achieve three main goals simultaneously. First and foremost, it needs to make a **Profit** to keep all its stakeholders happy. Secondly, it wants to promote **Social Equity** by making products and services available to all levels of the economic pyramid. In order to do this, organisations must ensure that the core requirements of the BoP are fulfilled to include them in economic activity and allow them to be valuable and empowered customers. The last goal for an organisation wanting to expand into the BoP is to ensure that the **Environment** remains unharmed. This can be achieved by designing the 4 P's – Products, Processes, Practices and Premises – in environmentally sustainable ways.

A business model shows the logic of how an organisation creates value for its customers and makes money. In Chapter 4.2 it was established that Osterwalder's (33) business model was the most comprehensive business model available in literature. The business model canvas, a tool devised by Osterwalder and Pigneur(11)to make the design of a business model more practical, consists of nine building blocks. The structure of the business model canvas is shown in Figure 25 (11).

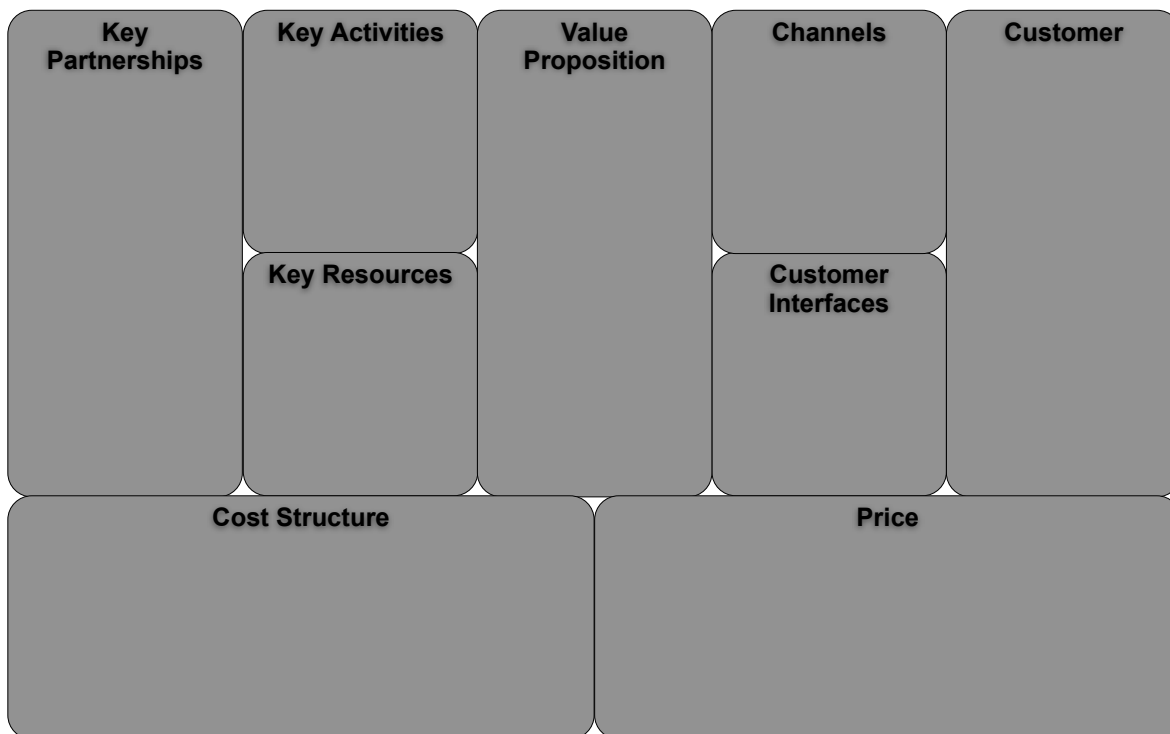


Figure 25: Osterwalder and Pigneur's Business Model Canvas

The Business Model Canvas can be divided into two main sections. The left side represents the costs that the organisation incurs (the infrastructure needed to created value), while the right side shows how value is created for the customer (11). Figure 26 shows how the Business Model Canvas is divided into a cost and a value side. Half the components fall under cost, while the other half fall under value. The Value



Proposition falls under both because it adds value to the customer while at the same time it has a great effect on the costs an organisation incurs. The two sides influence each other and if a part of the “value” side is eliminated or created, the “cost” side is affected.

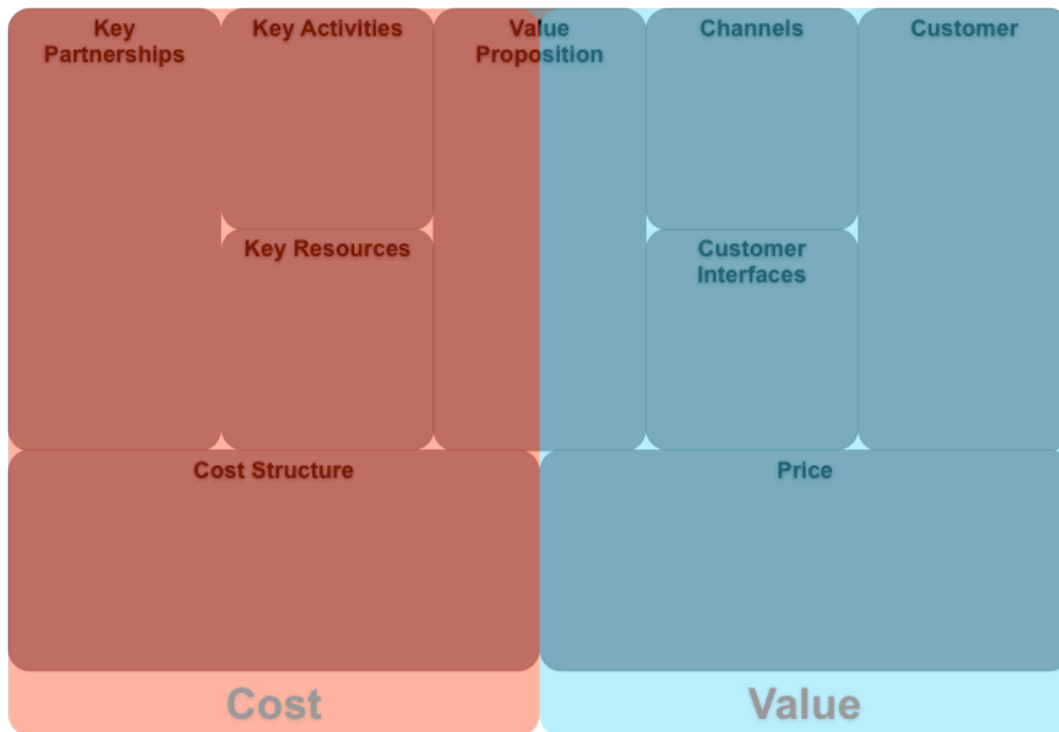


Figure 26: The cost and value side of the Business Model Canvas (11)

It is very important to remember that even though the business model consists of different components, it is most effective as a whole. The components work together to create the blueprint of how an organisation creates value and makes money.

The Blue Ocean Strategy is about finding new opportunities. The cornerstone of Blue Ocean Strategy is Value Innovation. Value Innovation rejects the conventional trade-off between low cost and differentiation (value). It seeks to increase value for customers while at the same time reducing costs. Value Innovation is discussed in more detail in Chapter 5.1. Figure 27 shows the concept of Value Innovation (49) by illustrating that Value Innovation occurs when costs are decreased and value is increased.

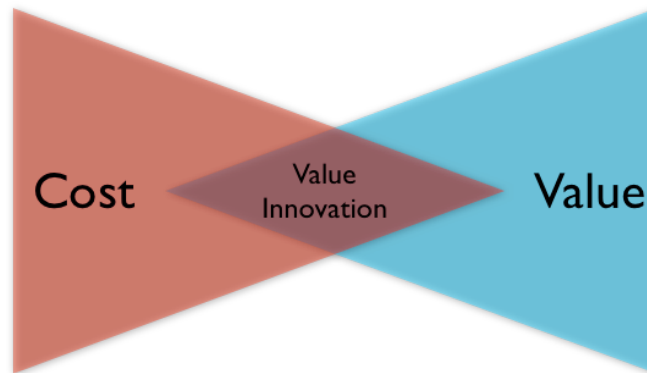


Figure 27: Value Innovation

The Four Actions Framework, another tool of the Blue Ocean Strategy, helps organisations overcome the trade-off that exists between low cost and differentiation. It can be divided into two main sections: creating more value, and reducing costs. The 'raise' and 'create' parts represent the value added, while 'eliminate' and 'reduce' consider how costs can be decreased. Figure 28 (11) shows the similarities between Value Innovation and the Four Actions Framework, and how they can be combined.

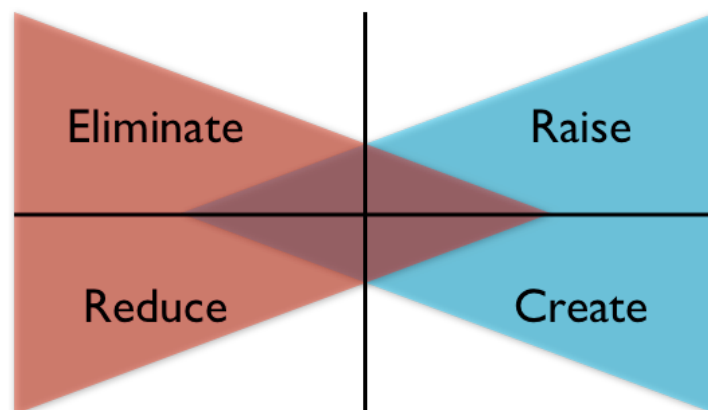


Figure 28: Combining Value Innovation and the Four Actions Framework

As can be seen from Figure 28, the Four Actions Framework is a strategic tool that strengthens and supplements Value Innovation.

When the business model canvas is combined with Kim and Mauborgne's value innovation and the Four Actions Framework, a powerful new tool is created (11). The right-hand side of the business model canvas represents costs and the left-hand side value corresponds with the value innovation concept (11).

Figure 29 (11) shows how the two theories can be combined, and what they have in common: increasing value while driving down costs.

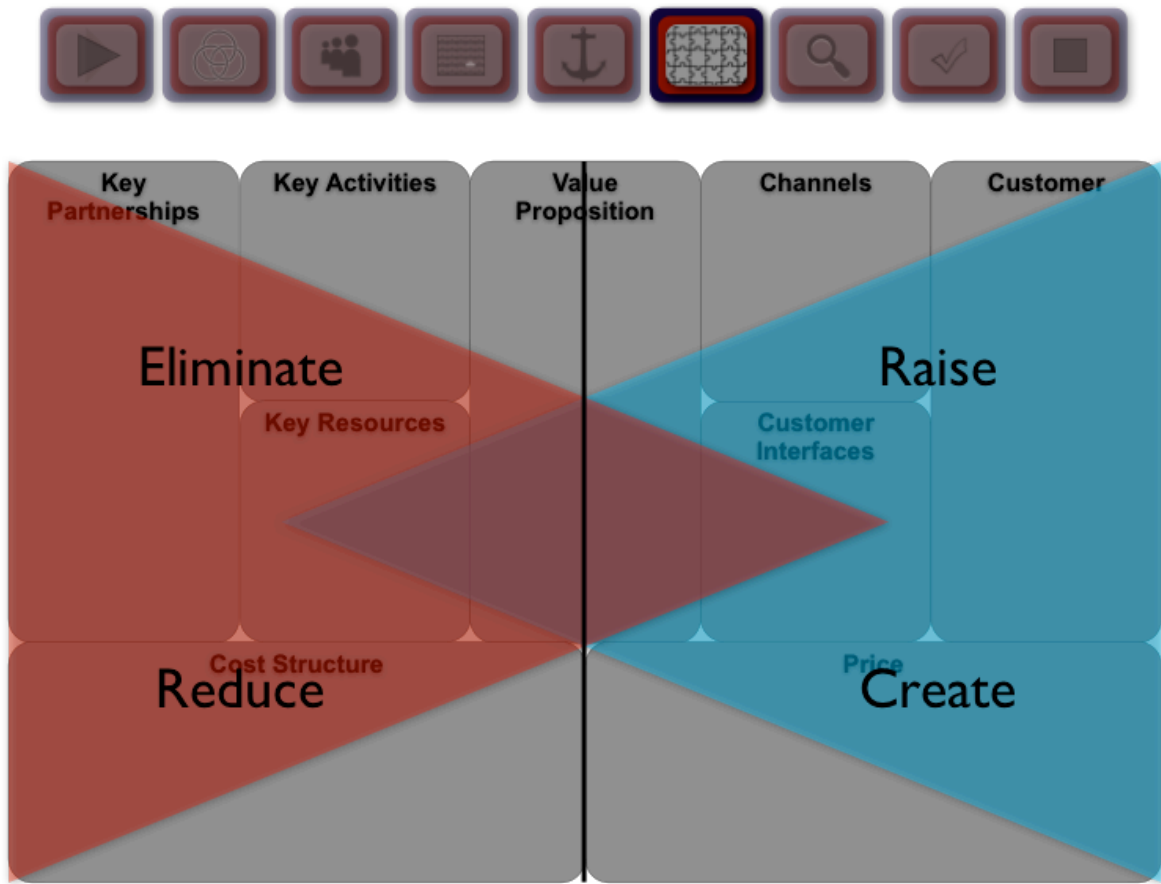
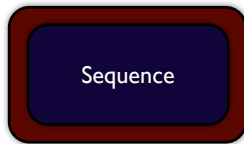


Figure 29: Combining the Business Model Canvas with Value Innovation and the Four Actions Framework
(11)

Once the connection between Blue Ocean Strategy and the Business Models Canvas is established, the next step is to figure out what the optimum order would be for business model design.



6.3 Determining the Sequence of the Business Model Design



To ensure that an organisation makes a healthy profit, it needs to build a robust business model. By getting the business model's design sequence right, business model risk can be dramatically reduced (49). Therefore, the Blue Ocean Strategy's strategic sequence will be followed as a starting point for the order in which the business model is developed. The strategic sequence was discussed in Chapter 5.2.4.

Kim and Mauborgne developed this sequence as an assessment to test possible blue ocean ideas. In the context of designing a business model, it can help with the design and evaluation of the business model, to ensure that any risk of failure is minimised (57).

Kim and Mauborgne's sequence consists of four steps: Utility, Price, Cost and Adoption⁴. Only after the organisation has completed the step in the sequence, can they move onto the next step. By combining the business model canvas with the strategic sequence for a Blue Ocean Strategy idea to produce one model, an arrangement can be created to build and test the components of the business model. Figure 30 shows how the components of the Business Model Canvas are compared to the steps in the Blue Ocean Strategy sequence and connected.

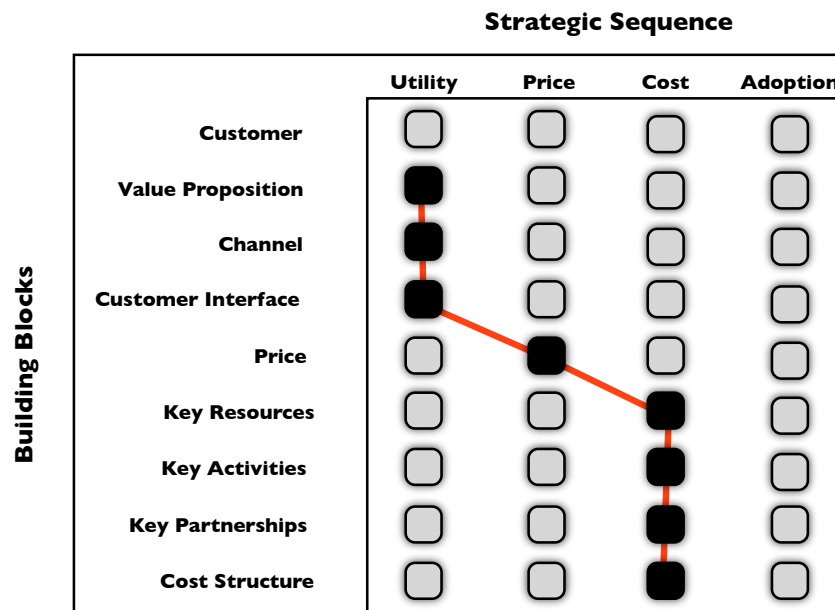


Figure 30: Connecting the strategic sequence of the Blue Ocean Strategy with the components of the Business Model Canvas

The Customer component does not fit under any of the headings in the strategic sequence, and as such it must be further explored. One of the reasons why organisations have not expanded into the BoP is because they were uncertain where to start designing their business model (Chapter 3.4).

⁴ Adoption will not be used in this study, because it concerns itself with the implementation stage of an idea, whereas this study looks at the planning stage.



6.3.1 User-focused Business Model Design

CK Prahalad has stressed the fact that organisations must not only do research on the BoP market, but that they “*must immerse themselves in the lives of their target market*” (25). In the case of the BoP, it is essential and extremely important to start with understanding the customers in order to overcome constraints and correct the assumptions that have been made about the market.

Business is all about addressing a market need and then satisfying that need. Therefore, the better an organisation understands the BoP, the higher the probability that the business model will succeed (58). The whole innovation process is very important because the BoP does not want ideas, technology or intellectual property: they want products and services that satisfy their needs. Real customers want solutions and services, but the problem is that most organisations only care about improving their products and don’t listen to what the BoP wants, which can lead to performance oversupply.

It is important to understand the market well and not to have any preconceived notions. An organisation must also find out who their competitors are and what their successes and failures have been.

Therefore, the customer component will be the first step in designing the business model. The sequence of the business model design will be discussed next. This is the approach an organisation must take to design a business model that can target the BoP successfully.

6.3.2 The Business Model Design Sequence

The first component that an organisation must explore is the Customer component. In this customer component, the organisation gains information about the BoP and the industry, and they can draw up a strategy on how to proceed with the design of the business model.

Step 1: Customers:

- Before an organisation can start designing their business model, it is of vital importance that they understand the needs and core requirements of the BoP. They need to have insight in their lifestyle, buying habits and frustrations. The first step in designing a business model for the BoP market is shown in Figure 31. A strategy aspect is included in the first step to give direction and guidance to the framework.



Figure 31: The first step in designing a business model: Customer and Strategy

The Value Proposition, Channel and Customer Interface components all fall under the utility step in the strategic sequence. Their test is whether they give the customer exceptional utility. The task of these three components is to create value for the customer. They also help an organisation take advantage of opportunities, and thus the author has called these three components the **Window of Opportunity**. Figure 32 indicates the Window of Opportunity.



The New Oxford American Dictionary defines a window of opportunity, as “a favourable opportunity for doing something that must be seized immediately if it is not to be missed.” Often, the Window of Opportunity indicates a time frame in which it is beneficial to take action or do something. In this study, the Window of Opportunity will indicate the components of the business model that make sure the organisation offers full utility to the BoP. It also allows the organisation to take advantage of the opportunities that exist in society. The offering is what the organisation provides their customer in terms of products and services.

The next three steps of designing the business model form the Window of Opportunity:

The Window of Opportunity

Step 2: Value Proposition

- It refers to the products and services that the organisation offers to the BoP. They must be designed to specifically fulfil the needs of the BoP. If the organisation can't design their products and services to satisfy the BoP, large sales volumes will not be reached.

Step 3: Channels

- In this component, the organisation has to figure out ways to make the BoP aware of the product and ensure that it is available at the right place and in the form they need it. If this can't be done, the organisation will lose out on sales.

Step 4: Customer Interface

- This is the last step in the Window of Opportunity. The interaction between the customer and the organisation is designed in this component. Customers must feel valued by the organisation to ensure that they are willing and prepared to do business with the organisation.

The Window of Opportunity shows what the organisation must do to capture the mass of the market. The BoP offers very little profit margin per person and an organisation that wants to make a healthy profit must therefore capture large volumes. The Window of Opportunity looks at the question of whether the organisation can fulfil the first three of the 4 A's: **Acceptability**, **Availability** and **Awareness**. An organisation must remember that if it cannot provide the BoP with the products and services that fulfil these requirements, the business model is not viable.

The last requirement of the 4 A's is **Affordability**, and the price component must be designed to fulfil it. This price step of the strategic sequence obviously corresponds to the price component of the business model.

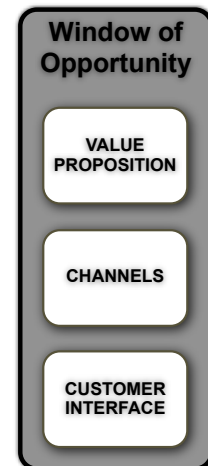


Figure 32: The Window of Opportunity



Price

Step 5: Price

The organisation must look externally at the market to determine the right price. The price that an organisation charges for a product must not only be affordable, but it must give the BoP value for money.

The last four components of the business model fall under the cost step of the strategic sequence. Key Resources, Key Activities and Key Partnerships are the Infrastructure that the organisation needs to accomplish the objectives determined in the Window of Opportunity. The difficulty of this step is to ensure that the organisation actually manages to lower the cost of the infrastructure to the targeted level to make a required profit while not compromising the quality and value of the product. The required profit is the basic profit an organisation needs to make to consider the opportunity favourable.



Figure 33: The Price Component

It is important that each of the infrastructure components must ensure that they reach their target cost, and the Cost Structure must not be separate from the Infrastructure. Therefore, for this study, the three infrastructure components form part of the Cost Structure. This means that the infrastructure components fall under the cost structure, where cost is a driving factor for each infrastructure component. Figure 34 shows the arrangement and configuration of the cost structure, as well as the relation between each component of the infrastructure.

Key Resources, Key Activities and Key Partnerships are the infrastructure that the organisation needs to operate successfully, and they form part of the Cost Structure to ensure the organisation delivers its products below the target cost (Figure 34). The lower the cost, the higher the profit!

The Infrastructure components must support and enhance each other because there are often no clear boundaries of where the task of one component starts and the other component ends. They are best designed simultaneously. Therefore, there is no specific order in which they have to be designed. The infrastructure components will each actively pursue reaching the target cost.

The Cost Structure is the next step and within this cost structure, the infrastructure components are situated. Therefore, the last three steps look at the organisation's Infrastructure needs and how to lower the cost to the target. They are as follows:

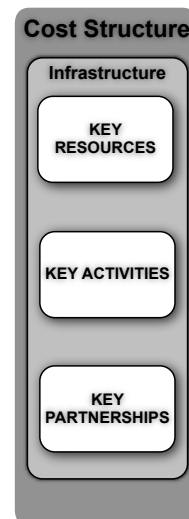


Figure 34: The Cost Structure

Cost Structure and Infrastructure

Step 6: Key Resources

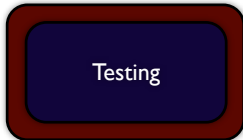
Step 7: Key Activities

Step 8: Key Partnerships



The Cost Structure phase shows what an organisation must do to actually reach its target costs and make a profit. This section looks internally at the organisation's operations and at how costs can be reduced to make the whole business model viable.

6.4 Testing



The viability of each component as well as the business model as a whole must be assessed while it is designed. After the development of each component, the organisation must consider the solution and decide whether the idea is viable. If the solution isn't viable, the design process must be halted until a feasible, realistic solution can be found.

Each component must fulfil either the core requirements of the BoP (4 A's and Utility, Price) or the core requirements of the organisation (Cost) to ensure that it is viable. The tests for each component are presented in Table 11. These tests will be discussed in more detail in Chapter 7. It is important to note that an organisation must first achieve the test before it can start designing the next component. If the test is not achieved, it must reconsider their component, until it can come up with a solution. If no solution is found, the business model will not be feasible, and can be risky.

Table 11: The tests for each business model component

Component	Test	
	Core Requirement (4 A's)	Strategic Sequence
1. Customer		
Window of Opportunity		
2. Value Proposition	Acceptability	Utility
3. Channels	Availability and Awareness	Utility
4. Customer Interface	Acceptability	Utility
Price		
5. Price	Affordability	Price
Cost Structure/ Infrastructure		
6. Key Activities	4 A's	Cost
7. Key Resources	4 A's	Cost
8. Key Partnerships	4 A's	Cost

The Window of Opportunity components ensure that value is created for the customer. These components are tested for their Utility, Acceptability, Awareness and Availability. The Cost Structure/



Infrastructure components ensure that operating costs are low to ensure that the organisation makes a healthy profit, and their test is Cost. It is important that the Cost Structure/Infrastructure components don't compromise value and quality when low cost is pursued. By testing the individual components as well as the whole, the risk of business model failure can be minimised. Figure 35 is derived from Table 11, and presents the order in which the business model components must be developed and tested.

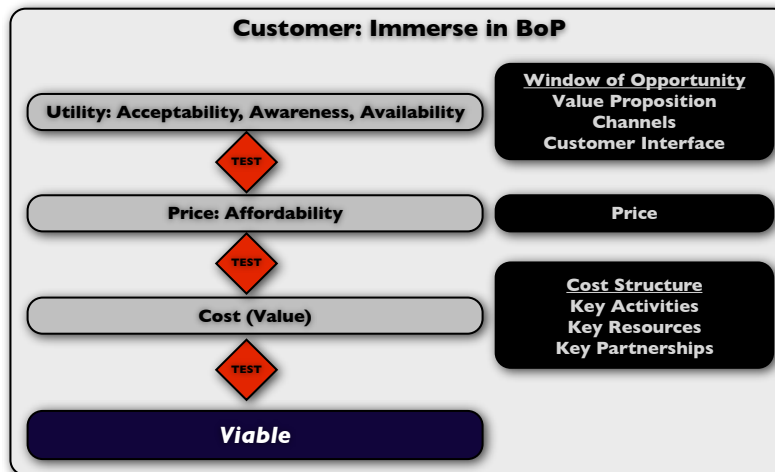


Figure 35: Testing the business model components to ensure viability

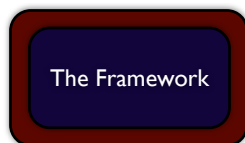
By combining the business model with Kim and Mauborgne's value innovation, Four Actions Framework and Strategic Sequence, and CK Prahalad's work on the BoP, a framework is devised called the **Business Model Development Strategy (BMDS)**.

The Business Model Development Strategy gives organisations:

- A series of steps to design the business model for organisations that want to target the BoP;
- An approach to fulfil core requirements of the BoP;
- An approach to validate and adjust the business model to ensure risk of failure is minimised.

The Business Model Development Strategy is discussed next.

6.5 The Business Model Development Strategy



The Business Model Development Strategy gives organisations a strategic approach to design and test their business model. It demonstrates the steps an organisation must take to make sure that the risk of business model failure is minimised. The BMDS is presented in Figure 36:

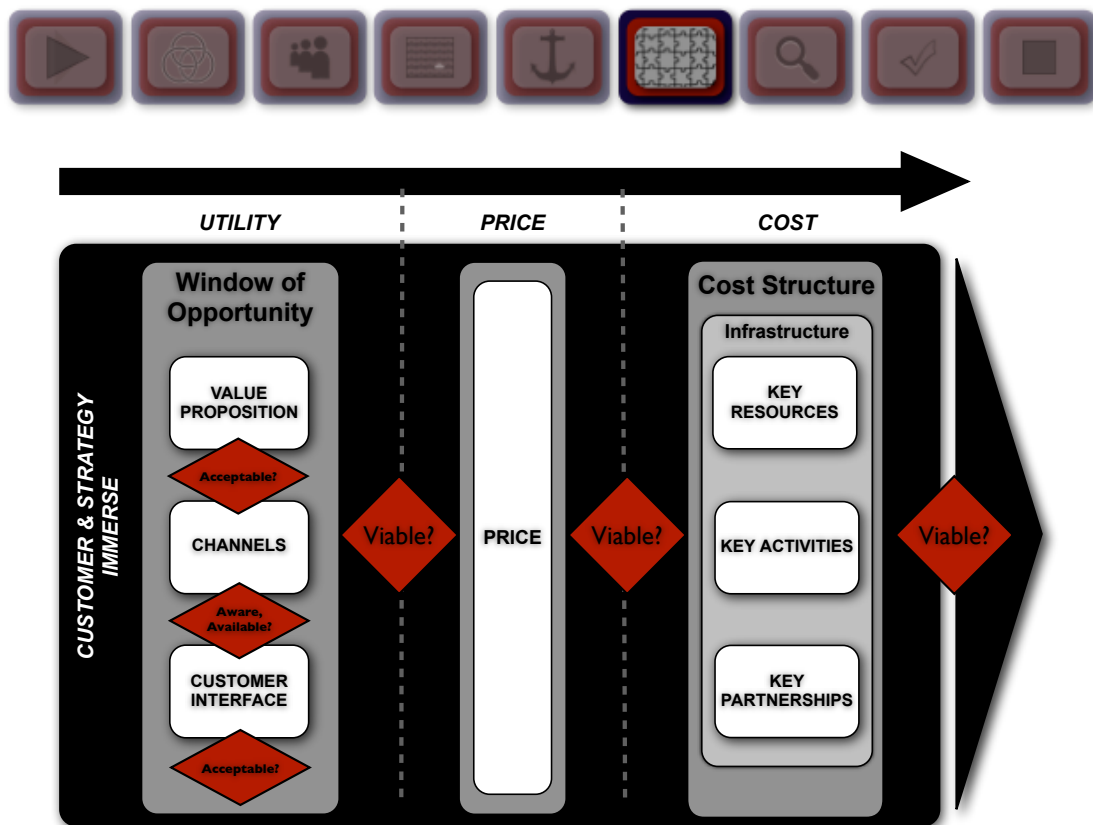


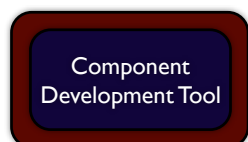
Figure 36: The Business Model Development Strategy

The framework (Figure 36) proceeds from left to right and the organisation must design and test each business model component in a specific order. If at any point a component doesn't pass the test, the organisation must go back to that component and rethink its design to come up with a better solution. Using the BMDS to design and test components can be a recursive process, because until a component passes the test, the organisation cannot proceed with the design of the next step.

The BMDS allows the organisation to design a business model from the bottom up, ensuring that the foundation is solid before moving onto the next step. An overview of the components is discussed in detail in Chapter 7.

Two powerful tools that have been used in devising the BMDS that organisations can use to design their business model is the Strategy Canvas and the Four Actions Framework. Another tool that organisations can use to give them context and understanding, especially of the BoP, is the Innovation Sandbox Process, which is adapted from CK Prahalad's Innovation Sandbox. It is very important that organisations realise that these tools are generic and must be personalised for the needs of the organisation, using relevant information. The Innovation Sandbox Process is discussed next.

6.6 Innovation Sandbox Process



The Innovation Sandbox (see Chapter 3.3) can be converted into a visual representation to organise the information gained from research done on the BoP.

Dabholkar (26) has identified the dynamic Innovation Sandbox Approach that has three elements:



1. **The walls:** A set of constraints, each of which corresponds to a wall of the sandbox
2. **The sand:** A testing ground for rapid prototyping and systematic experimentation
3. **The kids:** A set of heterogeneous, passionate people

For this thesis, a model called the **Innovation Sandbox Process** will be created from the work of Prahalad and Dabholkar. It is a structured method that identifies the constraints and core requirements for each component of the business model. The three parts of the Innovation Sandbox Process are:

1. Constraints and Problems: Define the constraints and problems that hinder success in the BoP.
2. Core Requirements: Define the core requirements (Walls)
3. Thinking inside the Box (Playing in the Sand)
 - Unconventional thinking, creativity and problem solving
 - Blue Ocean Strategy, Business Model, Innovation Sandbox and Sustainable Development tools
 - Some other possible tools

The constraints and requirements identified will put the BoP into context. This allows organisations to use innovation, unconventional thinking, creativity and problem solving to come up with solutions that will overcome constraints, and fulfil the core requirements of the BoP and organisation when designing a business model. Figure 37 shows a visual representation of the Innovation Sandbox Process, adapted from CK Prahalad's Innovation Sandbox (25,26). The Process first identifies the main constraints that the BoP population faces, then the requirements they have that needs to be fulfilled. Lastly, the organisation must "play in the sand" to find solutions and come up with creative ways to fulfil the needs of the BoP.

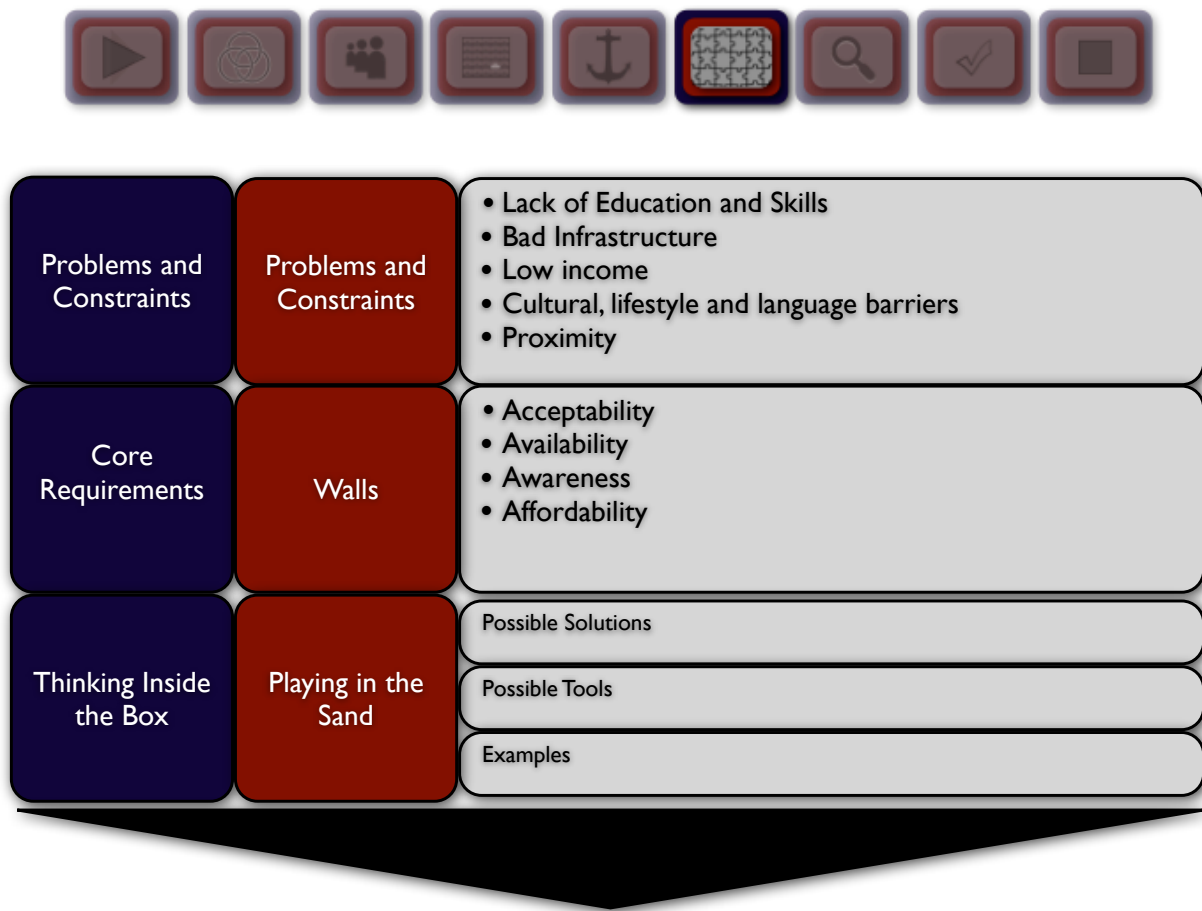


Figure 37: The Innovation Sandbox Process (Adapted from CK Prahalad's Innovation Sandbox (25)(26))

The constraints, requirements and any other relevant information must be deduced from the research done in the BoP (in the first step of the Business Model Development Strategy: Customer). The Innovation Sandbox Process can be used as a business model component development tool that assists the organisation in placing each component in context, figuring out what the biggest constraints and requirements of the BoP are and coming up with solutions.

There are many tools that organisations can use to develop the content of the business model, and the Innovation Sandbox Process is just one of them. Organisations must find tools that are appropriate to their needs!

6.7 Chapter Summary

The objective of this chapter was to assemble the Business Model Development Strategy. First the theories and methodologies that were used to assemble the BMDS were discussed and connected. Then the tests that will be used to assess the BMDS were established. Next, this chapter presented the BMDS. Lastly, the Innovation Sandbox Process was created.

This chapter has great significance, because the BMDS offers a solution to the problem identified in 1.1.2. It gives an approach that organisations can follow to design a business model for the BoP. When using the BMDS to design a business model, the recommended tests allow an organisation to minimise the risk of business model failure. In the next chapter, each component of the BMDS will be discussed in detail.



Defining the Components of the Business Model Development Strategy



In the previous chapter, the Business Model Development Strategy was assembled. This chapter will discuss all the components that form part of the Business Model Development Strategy.



7 Defining Components of the Business Model Development Strategy

Figure 38 shows a quick review of the Business Model Development Strategy (BMDS) that was developed in Chapter 6.

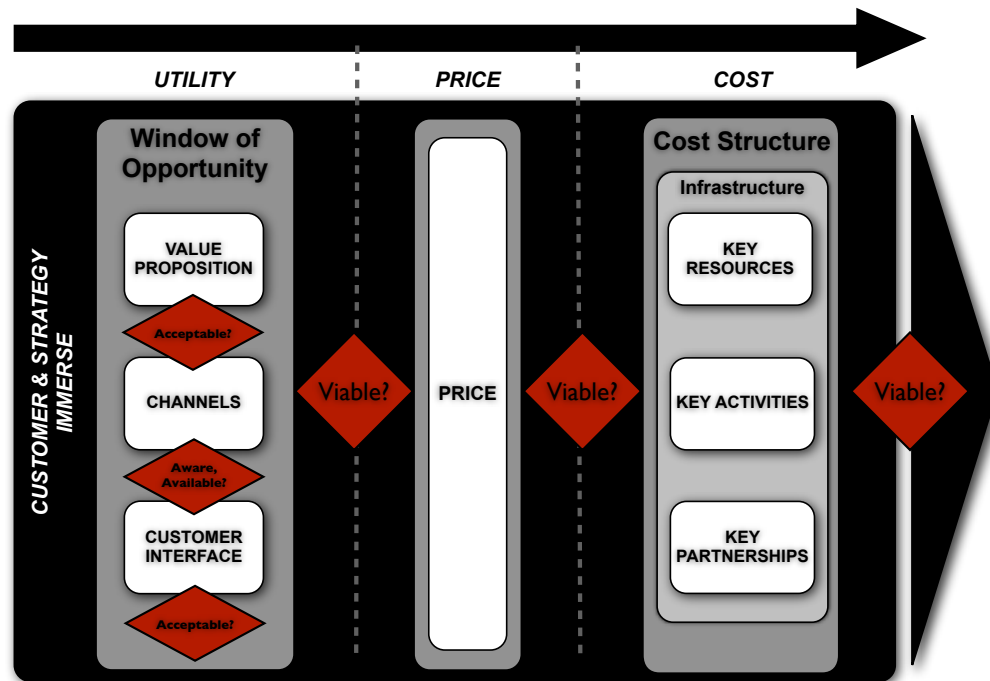


Figure 38: The Business Model Development Strategy

After a quick introduction, the chapter will start with the Customer component, and then move on to the Window of Opportunity, which includes the Value Proposition, the Channels and the Customer Interface. Next, the Price will be explored and lastly the Cost Structure, which includes the three Infrastructure components, Key Resources, Key Activities and Key Partnerships, will be discussed.

Figure 39 shows the structure of Chapter 7.

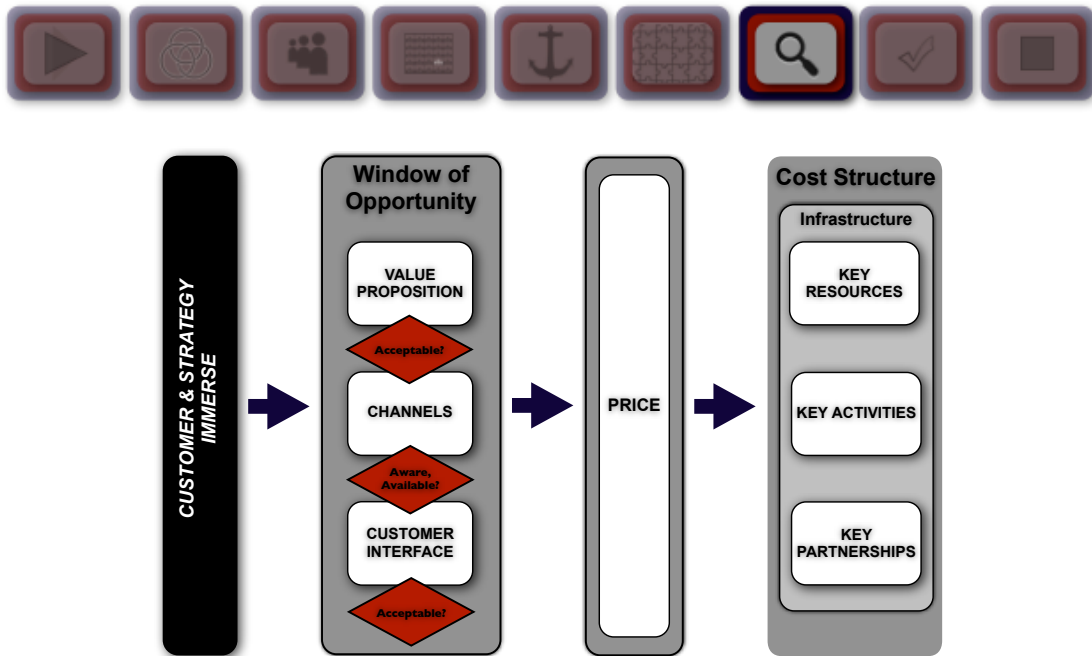


Figure 39: The structure of Chapter 7

The aim of this chapter is to find the problems and constraints that both the BoP and the organisations face, the core requirements that need to be fulfilled, and some solutions, tools and examples. A Capitec case study is also included in this chapter to show how Capitec fulfilled the core requirements of the BoP for each component.

7.1.1 Introduction

When an organisation wants to target the BoP, the nine components of the BMDS can be designed to fulfil their core requirements. This chapter will run through and discuss each component in the order established in the previous chapter.

7.1.2 Structure of this Chapter

In this chapter, each component of the BMDS will be discussed. Each component will be explored in the order given by the Innovation Sandbox Process in Chapter 6.6. First, the problems and constraints of the component will be identified, and then the core requirements of the BoP and the organisations will be determined. The third step is to show some possible solutions, tools and examples, and lastly, the Capitec case study for the component is studied.

Figure 40 shows the process and structure that will be followed in discussing the components of the Business Model Development Strategy.

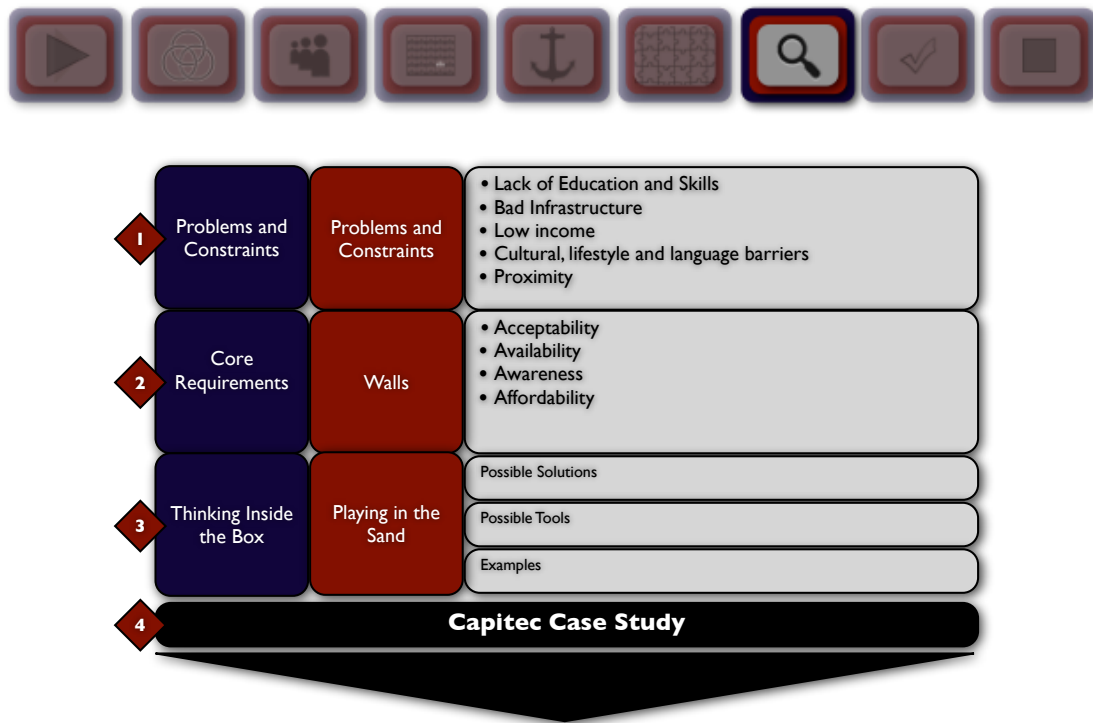


Figure 40: The Sandbox Innovation Process for exploring the components of the Business Model Development Strategy

The biggest problems and constraints for targeting the BoP are established first in each component. Next, the core requirements that an organisation must fulfil will be discussed. Then, a few possible solutions, tools and examples will be considered to communicate the type of solutions an organisation must come up with, and lastly an example of Capitec's business model component will be discussed.

7.1.3 Capitec Bank Case Study

The case study that will be conducted focuses on Capitec Bank. Capitec is a bank in South Africa that was established in March 2001 and listed on the JSE Limited on 18 February 2002 (59). They have designed their business model to include the previously unbanked in this sector, while still being profitable.

Capitec yielded an amazing 51,23% compounded rate of return over the last five years (60), and was ranked as number one in the Sunday Times Business Times Top 100 Companies survey for 2010. This survey presents the top 100 companies listed on the JSE. These companies are rated on the amount of wealth they earn their shareholders. It is interesting to note that even though the other top 10 in the survey are from industries other than banking, they all have something in common: They are currently successfully targeting the BoP (60).

Credit Suisse named Capitec bank one of the 27 "Great Brands of Tomorrow" in March 2010 (61). Carl Fisher, the Marketing and Corporate Affairs Executive at Capitec banks, says: "[At] Capitec Bank we have **based our business model on innovation** and doing things differently. We have applied a pioneering approach to traditional banking by using technology, which have enabled us to simplify banking, so this international recognition is a powerful endorsement of the success of our strategy so far. Our significant client growth is testimony of the **acceptance** of our money management solution to the market" (61). The case study will explore and analyse how Capitec has become so successful by analysing their business model in terms of the BMDS. This case study will focus on the banking division of Capitec.



7.2 Customer and Strategy

The first step in the Business Model Development Strategy is an **approach** for an organisation to understand the living conditions of the BoP. This stage includes a lot of research, analysis and exploration.

The organisation must explore and analyse the lives of the BoP to understand how they are different from their current markets and why they are often non-consumers. This Customer step is very important in the Business Model Development Strategy, and without thorough investigation and inquiry, the organisation might make unsuitable assumptions and decisions for their business model, which can lead to failed ventures in the BoP.

Figure 41 shows the six steps that must be followed by an organisation to understand the industry as well as the BoP. These six steps are based on Kim and Mauborgne's second principle, "Focus on the Big Picture, not the Numbers" (Chapter 5.2.2). To make the four steps in Kim and Mauborgne's second principle align with the needs of the BoP, it was enhanced and expanded to form the Six Steps for Understanding the BoP Market.

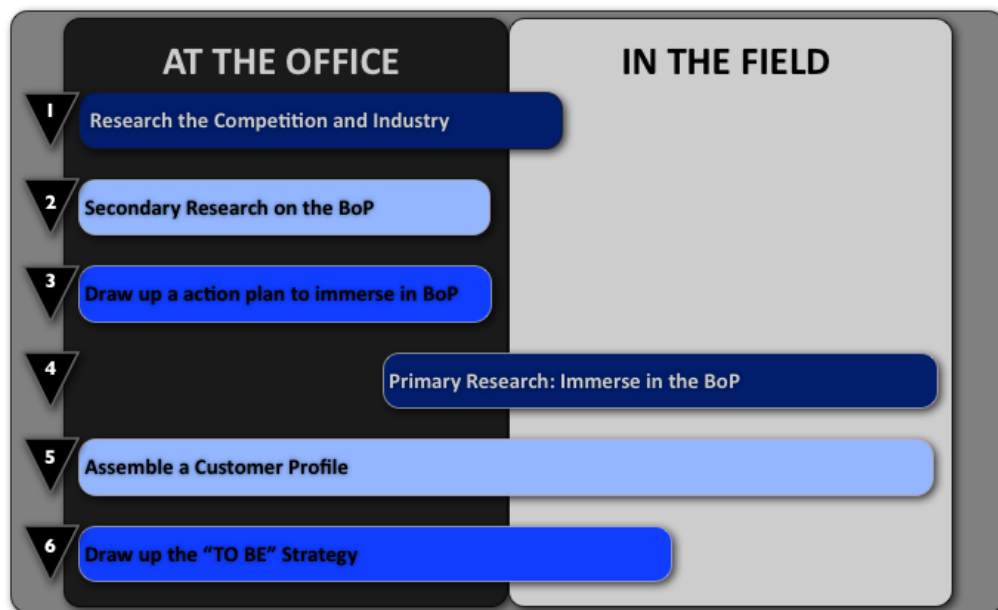


Figure 41: The six steps for an organisation to immerse itself in the BoP and gain insight and understanding of the industry and the BoP

These steps are an example of the approach an organisation must take to immerse into the BoP. An organisation must consider these steps critically and customise it for their use, to make sure it fits their industry and market. The steps are:



▼ Researching the Competition and the Industry

First, the organisation must understand their industry and their competitors by identifying the main competitors in the industry. Organisations can then understand where they are placed within the industry. They must also identify the factors that the industry competes on. With this information, the “As Is” Strategy must be drawn up using the strategy canvas. This will give the organisation perspective on what the industry is competing on. The strategy canvas was discussed in Chapter 5.1.2. It can also show an organisation where gaps exist in the market and which factors are not satisfying customer needs. Market boundaries can be reconstructed using Kim and Mauborgne’s first principle. The six paths framework (Chapter 5.2.1) can be a very helpful tool to redefine market boundaries.

▼ 2 Secondary Research

Secondary research is also called desk research, and in this study it refers to research on existing research, information and studies about the BoP, such as census, formal research and case studies. From this information, an organisation can draw up a preliminary PEST (Political, Economical, Social, and Technological) analysis about the environment in which the BoP lives. Organisations must also figure out who its non-consumers are. They can use Kim and Mauborgne’s third principle: Reach beyond existing demand (Chapter 5.2.3), to understand its non-consumers.

At this point, the organisation must be careful not to draw conclusions prematurely, before the whole study on the BoP is complete.

▼ 3 Plan of Action

The organisation must draw up a plan of how it plans to approach the BoP for closer study. The organisation must decide on the aim of going into the field and must draw up some questions that will give direction. Some possible questions the organisation must answer are:

- What are they looking for?
- Whom are they targeting?
- How will they target them?
- Where will they do research?
- When will they target them?
- What actions will they take?

Organisations must be very careful that they don’t just do fieldwork to validate the research they have done in the office (secondary research). The organisation must stay open for any new findings about the BoP.

The organisation must explicitly identify any assumptions and prejudices it has about the BoP, and go into the field with the mission of explicitly testing whether the assumptions and prejudices are true or not.

Organisations must figure out a plan of how they will establish the constraints and core requirements of the BoP. The plan must also indicate how the organisation will do research on the BoP while in the field.



4 Primary Research

The organisation must immerse itself in the BoP by doing fieldwork and observing and studying the lifestyle⁵ of the BoP to gain insights into the way they do things to determine their constraints and requirements. The organisation must find out the following to gain insight into the BoP market (15,25,62):

- Needs and core requirements
- Routines and habits – the conventional ways of doing things
- Behaviours – their reasoned actions
- Influences
- Livelihood and occupation
- Attitude and frame of mind – their world view
- Situation, obstacles and constraints
- Interests and pastimes
- Culture, language and traditions
- Education and skills level

The organisation must ensure that it enters the field with an open mind, completely aware of any assumptions and prejudices it has about this market. It must research the BoP properly to ensure all conclusions are based on research findings and are not influenced by personal feelings.

This step is the most complicated, because of the many constraints that organisations face. The BoP may distrust the organisation and not provide accurate information. The bad infrastructure may limit the organisation's ability to do research. This step is very important in first understanding the BoP and then designing a successful business model.

5 Customer Profile

The customer profile shows the summary of the findings, research and immersion of the BoP. Once again, an organisation must decide what information is important for them and the industry. The customer profile can include matters like:

- Information on the BoP
- Constraints that make the use of the product difficult in the BoP
- The constraints that organisations have to market entry
- Core requirements
- Information on the product use

This profile is used to gain a better understanding of the BoP, and will make the final step of the Customer component more straightforward, by making the information available in a clear, accessible form.

⁵Lifestyle denotes the way in which a group of people lives. When an organisation analyzes the lifestyles of the BoP, it examines the way people live instead of where they live (geographically), their income, their age or their demographics (71).



6 “To Be” Strategy

After the profile of the BoP is drawn up, the organisation can use the understanding and insight it has gained and then draw up a strategy that will assist in designing the new business model components. The steps an organisation must take to draw up the “To Be” Strategy is based on Kim and Mauborgne’s second principle (49):

- 1) Discuss and decide on a new strategy.
 - The new strategy must have
 - **Focus**⁶
 - **Divergence**⁷
 - **A Compelling Tagline**⁸
 - Draw up the Four Actions Framework⁹ to create new elements and decrease unnecessary elements
 - Draw up the “To Be” Strategy Canvas
- 2) Get Feedback and refine strategy. Decide on the outcomes that the business model must fulfil.
- 3) Draw up final “To Be” Strategy canvas
- 4) Use new strategy to build and test the business model

The new strategy must become a reference point for the decisions that have to be made about designing the business model. The new business model must be designed to support the new strategy.

Capitec used an innovative approach to gain insight into their market.

Capitec Case Study: Customer Component

Capitec has a good understanding of their customers’ needs. The wine and liquor industry background that the founders of Capitec have brings them unique insight into the BoP: the liquor merchants recognised that the BoP has a large spending power. They made an effort to understand their customers and their frustrations and noticed that they don’t have any access to affordable financial services (63). By successfully targeting the BoP, Capitec disproved many assumptions about the BoP:

- They do need financial services.
- There is a propensity for saving if it is accessible.
- When the product is right and acceptable, the market can be served very profitably.

⁶The organisation cannot do and be all things to all people, but they need to **do a few things very well**.(49)

⁷ The strategy of an organisation must be unique and different to that of its competitors (49).

⁸ “A good tagline must not only deliver a clear message but also advertise an offering truthfully, or else customers will lose trust and interest.” (53).

⁹The Four Actions Framework was created by Kim and Mauborgne (49) to overcome the compromises that the industry forces customers to make. Cost savings are made by **eliminating** and **reducing** some feature that the industry takes for granted and which doesn’t add value, and the value for the customer is increased by **raising** and **creating** elements that the industry has never offered before (49).



Perceptions of banks in the past were that they are expensive, they offer complicated products and services, and opening an account is difficult. Another perception was that a bank was not a place to grow your money. Capitec changed these perceptions by fulfilling the needs of the BoP.

Capitec's founders immersed themselves in the BoP by visiting many townships in South Africa to understand the market (64). They identified the constraints and core requirements of the BoP in the banking industry. They observed people using money, noticed where they spent most of their time, figured out why current banking services were not fulfilling the needs and core requirements of the BoP, and made an effort to understand their lifestyle. Capitec noticed that products were complicated, expensive and the BoP could not access them. The BoP also lacked the confidence to engage with banks that generally treated them without respect. Therefore, Capitec came up with the core requirements to overcome the constraints of the BoP in the banking sector. These are: Simplicity, Accessibility, Affordability and Personal Service.

The whole process of immersing itself in the BoP helped Capitec identify the core requirements of the BoP in the banking sector. They designed their products and services to fulfil the core requirements.

In hindsight, the Four Action Framework can be used to see where Capitec made the most dramatic changes to their business model:

1. Eliminated:

- Paper and cash at their branches.

2. Reduced:

- Bank account options: simplified their offering.
- Security on location (which they could decrease because they didn't keep cash on location).
- The complexity and time to open an account by using a paperless system.
- Number of cards: customers used a single card and pin for all their transactions.
- The price of transaction fees.
- The branch sizes (building more branches that are smaller, to increase the bank's accessibility).

3. Increased:

- The number of branches.
- Their use of technology. They use biometric identification. EMP chip technology allows users to use their cards offline that provides for those people in remote rural communities who have limited access. The technology increases simplicity and accessibility.
- Capitec increased their banking hours, to allow for easier access for their customers.
- The personal contact between Capitec and the customer was increased.
- The interest rate on savings accounts.
- Capitec increased the number of languages at their branches to try and serve all their customers in their language of choice.
- Capitec increased the recognition they gave all customers, no matter where they are situated on the economic pyramid, by treating all their customers with respect.

4. Created:

- Biometric Identification by using fingerprint technology and photos to identify their



customers.

- Mobile stations which allow Capitec to capture new customers off-site.
- New partnerships with retailers, which allows customers to draw money at the cashiers.
- A toggle for Internet banking which increases security.
- Central control. It increases simplicity and drives down costs.

Capitec recognised that many customers have similar needs and concerns about banks. The middle- and upper-class has the same basic banking needs as the BoP. Therefore, they started expanding into the middle-class market and opened a branch in Rosebank(63). Capitec has recognised the importance of commonalities in the economic pyramid. No matter where people are situated in the economic pyramid, they still need core banking. And Capitec provides this.

Capitec has broken the boundaries of the industry (based on the six paths framework of Blue Ocean Strategy). They became a substitute for other banks, and an alternative to keeping money in a tin under a bed. These substitutes and alternatives were Capitec's biggest competition. Capitec targeted the noncustomers who were previously unbanked, breaking the boundaries of **path1**: Look across alternative industries (See Chapter 5.2.1).

Capitec looked across strategic groups within its industry by actively targeting the BoP and including them in their target market (**path2**, Chapter 5.2.1). They lowered their prices and increased the value the BoP received from banking. They also helped change the perceptions organisation had about the BoP. Complementary products (**path4**, Chapter 5.2.1) that Capitec offered were that groceries could be bought at no transaction cost from retailers. Capitec added functionality to its offering by decreasing price and increasing the simplicity and accessibility of its products. It also increased the emotional appeal of the product by treating their customers with respect, simplifying the products and processes to ensure that customers never feel embarrassed by their lack of skills and education. **Being involved in the brand gives them social status**. Customers also have more power in negotiation, making them feel valued and in control (65).

The next step in the BMDS is to design the Window of Opportunity.



7.3 Window of Opportunity

This section will explore the Window of Opportunity. The Window of Opportunity helps an organisation to identify new possibilities and design all their offerings to a standard that is acceptable to the BoP. The mission of the components in the Window of Opportunity is to ensure that the customer receives exceptional utility from the products and services the organisation offers.

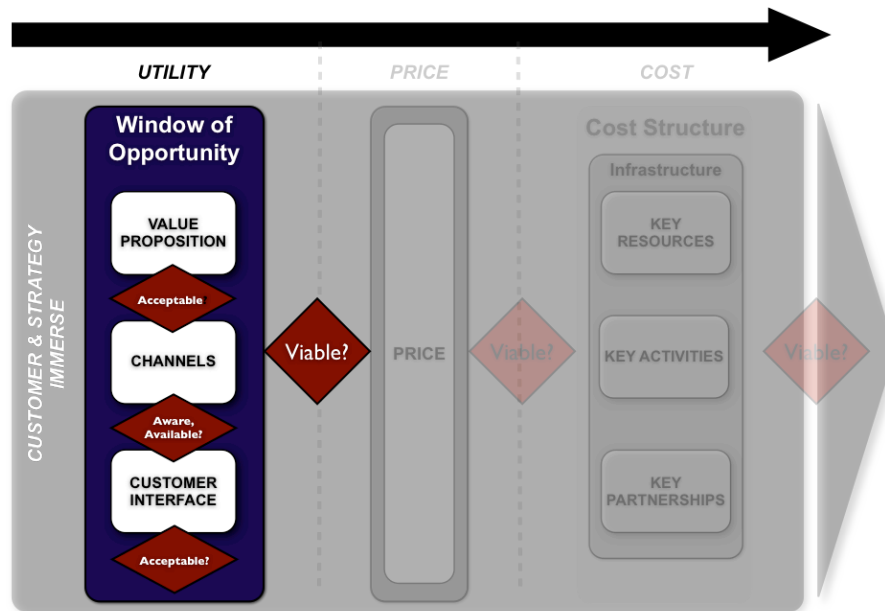


Figure 42: The Window of Opportunity within the big picture

The Window of Opportunity consists of the Value Proposition, the Channels and Customer Interface.

7.3.1 Value Proposition

The Value Proposition component is the first component of the Window of Opportunity (Figure 43). It describes all the products and services that the organisation offers its customers. In the BoP context, this component must also describe and indicate what adjustments and changes need to be made to satisfy the product/service needs of the BoP.

In a recent global study by Synovate (66), it was found that **low-income** consumers in emerging markets want the same quality products and most of the same things out of life as middle-class consumers. The biggest difference is in the purchasing behaviour of the two income classes. The study also found that the BoP market doesn't have lower standards, just different priorities, and as such is often neglected. The BoP wants the same things as their middle-class counterparts, but they have limited purchasing power. Completely redesigning and innovating the Value Proposition can make products more affordable; it can also assist in overcoming some of the other constraints that the BoP population has in using products and services.



Figure 43: Value Proposition step

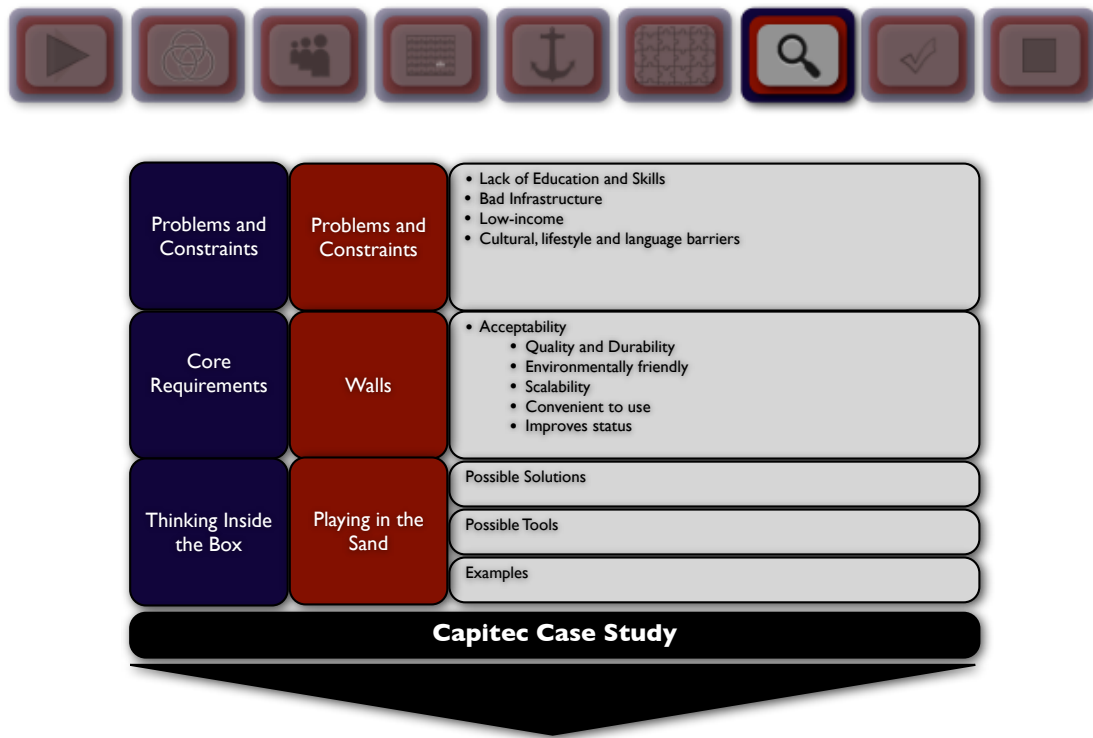


Figure 44: The Sandbox Innovation Process for the Value Proposition

Figure 44 shows the process and structure that will be followed to explore the Value Proposition component of the Business Model Development Strategy.

1) Problem and Constraints

The BoP often **lacks education and skills**, and complicated products and services can intimidate them and make them seek substitutes and alternatives. *"Marketers also need to understand that the competition they face in such a market is not just from other brands within a product line but from other product categories altogether, as due to budget restrictions, low income consumers face choices between two entirely different types of products, rather than choices between brands"* (66).

Products and services that don't comply with the language, culture or lifestyle of the BoP can also be rejected by the BoP. **Language, cultural and lifestyle barriers** are barriers that prevent the BoP from using the product/service. Examples include putting instructions on packaging in a language that the BoP cannot understand, forcing Western practices onto local customers or having opening hours that don't fit into the work patterns of the BoP.

The BoP often lives in areas with substandard infrastructure, which is why the offering needs to be robust, to ensure that electricity fluctuations, poor water quality, dirt and waste don't affect the workings of the offering. Another possible constraint is the **hostile environments** of the BoP. These include:

- Unsanitary conditions due to poor service delivery and pollution
- Noise pollution
- Product abuse – due to the rough circumstances of the BoP
- Low-quality infrastructure
- Electricity fluctuations
- Poor water quality



A hostile environment can create many problems for the products and services that must survive in the BoP.

An organisation must overcome these constraints by identifying the core requirements that the Value Proposition must fulfil to successfully target the BoP market.

2) Core Requirements

The core requirement for this component is to make sure the BoP market **accepts** the offering. Each organisation needs to come up with a couple of questions that will allow them to identify the needs of their customers in more detail.

- 1) What value is delivered to the customer?
- 2) What need of the customer is satisfied?
- 3) What is the competitive advantage of the offering?
- 4) What differentiates it from other products and services?

The Value Proposition looks at how the offering is designed. The organisation needs to look at the offering and find new ways of making it more usable and convenient for the BoP, while at the same time reducing costs. The BoP will accept the offering if the offering is:

- Simple, Usable, Basic, Functional
- High-quality
- Robust
- Durable
- Practical
- Scalable

All these needs fall under the Acceptability core requirement.

It is very important that an organisation customise its Value Proposition for its specific industry and target market. Some solutions on how products and services were adjusted for the BoP will be discussed next.

3) Thinking inside the Box

This step looks at possible solutions, tools and examples.

During the whole product/service design process it is important to always engage with the end-user, the BoP, because the organisation needs to make sure that the customer can actually use the end-product and that the engineers and scientists haven't just gone ahead and developed their own ideas and concepts.

Maslow's hierarchy of needs determines the order of importance of human needs, where the higher needs in the pyramid become important once the lower needs are met (67). It also shows how people are motivated to satisfy the lower needs first before they attempt to satisfy the higher needs. The needs of each level can be met in a number of different ways. The Value Proposition is a basic need that has to be met. If the organisation can't design a Value Proposition that is acceptable to the BoP, they will not



succeed, because the BoP doesn't want a product that is affordable and available if it doesn't fulfil their needs.

Most engineers and researchers start with a completely technical proposition or something that would fulfil their own needs. But it is very important to ask that if the organisation decides to develop this product, whether it will be able to sell it to anyone? It is critical that every player in the chain be identified, to ensure shared vision and alignment.

Organisations need to be extremely creative in solving the problems that interfere with the product use of the BoP. Some solutions organisations might consider are listed below.

- Simplify the design
- Change the design
- Use alternative materials that are:
 - Stronger
 - Cheaper
 - More robust

Sometimes, the offering must be completely redesigned to fulfil the product needs of the BoP, and innovation is an important step. The organisation must look at ways to reduce material usage and design an offering that is more robust. It is important that organisations don't just strip down their existing products, but actually develop a special product for the BoP market that offers exceptional utility from purchase to use to maintenance and then disposal. They can use the Buyer Utility Map¹⁰ to assist them. The Buyer Utility Map was discussed in Chapter 5.2.4.

¹⁰The Buyer Utility Map helps managers to understand all the different levels and phases where they can improve utility and value (49).



Table 12: The Buyer Utility Map

The Six Stages of Buyer Utility

The Six Utility Levers	Purchase	Delivery	Use	Supplements	Maintenance	Disposal

The Buyer Utility Map consists of 36 spaces, and by locating a new product in one of them, managers can see if the new idea will create a different value proposition from all the products that are already available (57). Often managers try to give more of the same utility at the same stage to their customers. *“Unless the technology makes the lives of buyers dramatically simpler, more convenient, more productive, less risky or more fun and fashionable, it will not attract the masses no matter how many awards it wins!”* Sometimes a product must be available in packaging that is more affordable, or the product must be scaled down and redesigned to satisfy the needs of the BoP.

Hindustan Unilever Limited started using smaller packages for products like shampoos and tea, because the BoP could not afford the high costs of large volumes (68). They recognised that BoP customers often shop for daily needs, because they are normally paid on a daily basis. This is a good example of how an organisation can tailor its offering for the BoP.

The Four Actions Framework (Figure 45) is a good tool that organisations can use to find ways of increasing value for their customer while driving down cost. The Four Actions Framework was discussed in more detail in Chapter 5.1.3.

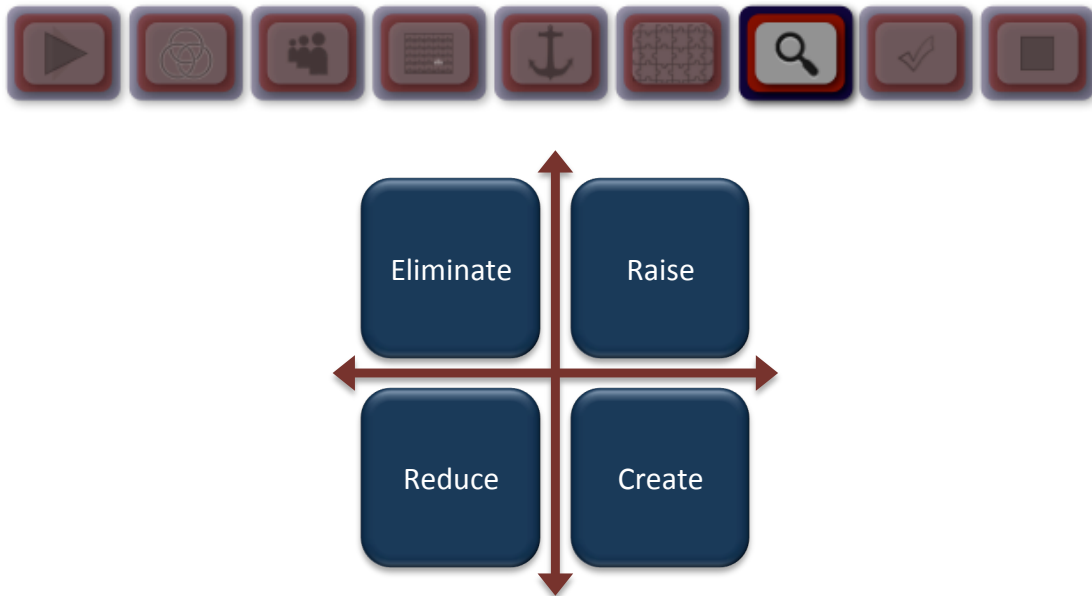


Figure 45: The Four Actions Framework

Intuit is a good example of an organisation that tailored its offering to fit the customers' needs. The biggest competition for an accounting software package is the pencil: doing the accounts by hand. Organisations that develop products that are too complex will lose the customers at the low-end who want something very simple. Intuit makes financial software and they are especially well known for their personal financial software package, Quicken. This program is very easy to use and install. The product disrupted more advanced accounting products that were too complex for customers with more simple needs to use. The other products had complexity and much more to offer, but for the user that only needs the basics, other products were confusing and difficult, and because most companies are too small to employ accountants, the simpler option was the better option. This is a clear case of performance oversupply and alternatives in the industry (28), and an opportunity that Quicken took advantage of.

Illiteracy in South Africa might force banks to rethink the fundamentals behind ATMs, because how can an ATM be operated if the user cannot read? Banks like ICICI and Citibank developed ATMs with fingerprint authentication that enables the user to navigate the ATM with the help of voice navigation (68). These banks have also removed minimum account balances to make the product available to a wider customer base.

By tailoring the product to the needs of the BoP, organisations can make products available to the BoP, which they previously never could have afforded. Organisations like Cemex provide access to credit for cement, and architectural consultation to families who would normally not be able to afford it. They can speed up the construction time by a third and save 20% on costs. They also group three families together and give them joint responsibility for payments (68).

Organisations must also keep their eyes open to notice alternative uses for their products. Haier is a good example of a manufacturer that listened to its customers. In China, Haier's customer service team was called in to unclog a drain in a washing machine. They discovered that the washing machine was used to wash potatoes and other vegetables as well, which clogged the drain. Instead of holding the customer responsible for such blunders, Haier noticed a gap to adapt their product to their customers' needs. They designed a washing machine with a wider pipe that can wash vegetables as well as clothes. This gave them a chance to gain market leadership in China, by adding something extra to their product (24). Organisations need a deep understanding of the needs of the BoP, as well as innovative thinking, to make the offering acceptable to the BoP.



Bettencourt and Ulwick (69) formulated the process of job mapping. It maps the job that customers try to have done by breaking down the specific task that a customer wants to complete into a series of process steps. Unlike process mapping, which looks at how a customer completes a specific task, this looks at the job that a customer wants completed.

Their work has revealed three fundamental principles about job design (69):

- All jobs are processes.
- All jobs have a universal structure.
- Jobs are separate from solutions.

The aim of job mapping is *“to discover what the customer is trying to get done at different points in executing a job and what must happen at each juncture in order for the job to be successfully carried out”* (69).

Products must be designed to satisfy specific needs. It is important to know what job a product is bought for, and to know what jobs aren't being done very well. This can give innovators ideas to figure out how they can improve their products and *“beat the true competition from the customer's perspective”* (14).

Capitec Case Study: Value Proposition Component

The core requirement for Capitec's products is simplicity. The BoP may lack basic skills, education and literacy, and therefore Capitec has simplified their offering. Opening a new account takes ten minutes and is a completely paperless process. All a potential customer needs is their green barcoded ID and Proof of Residence. The staff enters all information into the system. This is a non-threatening process, designed to make the customer feel welcome and safe. Capitec offers a basic account, but it has the full functionality necessary for core banking. Capitec offers a single standardised product range, and they keep it simple. They have maintained their focus (core banking for the individual) and resisted selling other financial services (65). Their focus is on ease of use, making the lives of their customers as convenient and simple as possible.

Another way in which Capitec offers its customer's value is by automatically giving free account balances. They have realised that the first thing most customers check when they get to the ATM is their balance. Capitec also provides their customers with card readers at retailers where they can check their balance. This can eliminate the embarrassment customers might experience when they swipe their card at the cashier and find that they do not have a positive balance. Capitec is conscious of the fact that for a poor person it is utterly humiliating to be perceived as poor. When a high-income person's card doesn't work, they just take out another card and there is no humiliation because their status is more deeply rooted than in perception.

Customers receive a single card and pin for all their accounts (**a maximum of three**) (64). Capitec's debit card is designed with an embedded chip that allows their clients to conduct transactions even if the server is offline (63). They developed the EMP chip technology in collaboration with MasterCard. This card



enables people in rural areas to transact without cash, no matter how remote the area or whether they have a connection.

Capitec has developed a token for Internet banking, which increases the security of Internet transactions. This product has had a slow take-up (65) with the BoP, because few people at the core could afford and use it. Capitec has realised that cellular phones are the future and is busy converting their Internet banking to more accessible channels by making use of even more accessible locations and using telecom banking.

Capitec created products and services that made the user feel in control. The organisation doesn't want the user to feel stupid, inferior or afraid of doing something wrong. When they feel insecure and embarrassed they will be apprehensive about using the product. Creating a "safe place" for users with products and services that are straightforward, friendly, non-threatening and boost self-confidence, while empowering them, creates dignity. Capitec also doesn't quote figures like "effective interest rate" that can intimidate their target market or can be misunderstood (65).

Capitec's Value Proposition offers their customers status, simplicity and good value. It fulfils the BoP's core requirements. Capitec offers a net positive return for their customers. Their fees are low, while their interest on savings account is high. Their interest outweighs their fees (65).

The main test the Value Proposition of an organisation must pass to minimise the risk of failure in the BoP is:



Is the product/service accepted by the BoP? Does it offer utility to its customers and non-consumers? If yes, move onto the next step, else rethink the Value Proposition.

Failing the tests

If the organisation fails the test, it has to go back and rethink the component to come up with a new solution. If it does not manage to resolve the problems that keep it from passing the test, the business model might not be feasible, and the organisation must carefully consider whether it wants to continue with designing the business model. By finding warning signs and problems early and either overcoming those problems or discontinuing the design of the business model, risk of failure can be minimised.



7.3.3 Channels

The design of the Channels component follows the Value proposition (Figure 46). The Channel component of the business model includes all the **Marketing and Distribution** activities that an organisation needs to fulfil in order to make potential customers aware of the product/service and ensure that it is consistently available. It looks at how customers can be approached and contacted, and which communication and marketing channels are most effective. The organisation must find innovative ways and alternative routes to reach the BoP. Effective marketing and distribution channels are very important to ensure that an organisation can attract a large volume of clients, which is critical because the profit margin on each purchase is low, therefore customers must be attracted in large volumes ensures that organisations can secure a large revenue.

In a study carried out by Synovate (66) about the low-income consumers, they observed that the key to future growth in the BoP is good distribution and marketing channels. Organisations must make an effort to understand the purchasing habits and preferred communication channels of the BoP.



Figure 46:
Channels step

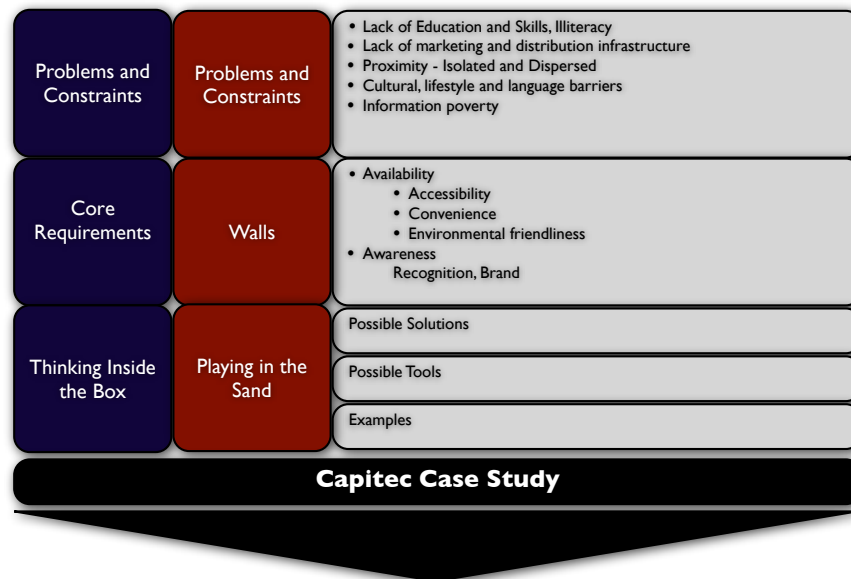


Figure 47: The Innovation Sandbox Process for Channels

Figure 47 shows the process and structure that will be followed to explore the Channels component of the Business Model Development Strategy.



1) Problems and Constraints

The problems and constraints faced by an organisation concerning marketing and distribution in the BoP are as following:

- Information poverty: The BoP has limited access to information and digital technology.
- Excluded, isolated locations that are widely dispersed: The BoP lives in hard-to-reach places.
- Language and cultural barriers
- Traditional distribution costs are very high in these areas.
- Bad infrastructure
 - Run-down roads
 - Fluctuating electricity
- Lack of security can be a threat to the organisation and they must always consider the:
 - Safety of staff
 - Safety of their products and resources
 - Safety of transportation
- Ease of buying and product availability: Sometimes the BoP wants to buy a product but it is not available.
- On-time delivery

These problems need to be overcome to ensure that the Value Proposition will reach the customers on time, in an affordable way and intact.

2) Core Requirements

The core requirements of the channel components are **Awareness** and **Availability**. To ensure success at the BoP, the Channels must be:

- Affordable
- Effective
- Timely
- Efficient

The BoP must recognise the brand, and be drawn to the product. The brand must give them social status, by increasing their self-worth and self-respect. The organisation must ensure that the product is available consistently, to ensure that the brand can build a following. If the BoP can't get hold of a product, they might switch brands, which might have a devastating effect on the organisation's sales.

If the solution and design of the business model component doesn't fulfil the core requirements of the BoP, the organisation must rethink and redesign the component until the core requirements are fulfilled.

3) Thinking inside the Box

This step looks at possible solutions, tools and examples.

Aravind Eye Hospital wants to eradicate all needless blindness in India (1). They go to great lengths to get large volumes of customers and making the BoP aware of their offering. First, they have a



community-based rehabilitation project where they actually go from house to house trying to identify eye problems. They also have eye-camps where people are tested and those patients who experience eye problems are treated. The staff at Aravind screens school children for eye defects and takes corrective measures at an early stage (1). These tactics help Aravind to attract new customers.

The organisation must understand the buying habits and the preferred communication channels of the BoP. Storeowners have a great influence over the BoP by what they stock and recommend. Many individuals in the BoP are illiterate and therefore visual communication is very important. The Four Actions Framework (Chapter 5.1.3) can be used to find solutions to the channel problems.

Procter & Gamble (P&G) targets the BoP by opening “golden stores”. These are small stores in far-off locations that offer about 40 of P&G’s products, and don’t stock any competing brands. The advantage that the storeowners get from only stocking P&G products is that P&G agents come by on a regular basis and help the storeowner with the setup of their window display (68).

The Synovate study also draws attention to the relationship between customers and storeowners in the BoP by stating that:

“Low-income consumers also tend to shop locally and develop a loyal, trusting relationship with the owner of their small neighbourhood store. This gives the owners of such stores a unique ability to influence low-income consumer purchasing habits, both through the products they stock and those that they recommend. Such word of mouth plays an important role in all product communication. Many low-income consumers are illiterate with little formal education and while they watch plenty of television, word of mouth recommendations, visual identity and communication using graphics is vitally important.” (66)

Organisations must not disregard the importance of the personal relationships in the BoP in marketing and distributing products.

Hindustan Lever Limited (HLL) understood that conventional marketing and distribution would not work at the BoP because of the constraints that they face everyday. Therefore, they developed women’s self-help groups that operate as a direct sales force going from home to home to sell the HLL brands. This initiative empowers women by developing them as entrepreneurs, as well as making products available to the BoP. These women could directly communicate the hygiene benefits of HLL’s products and build a good relationship by educating the poor on the health advantages of washing their hands with soap. This allowed HLL to make a good profit while changing the lives of Indian people (1). HLL has invested in non-traditional and grassroots marketing, and it has paid off.

Nestlé in Brazil has recruited women to sell yoghurt and biscuits. These women use direct sales throughout the community, but they are based at their homes. Customers are given a two-week leeway to pay, and Nestlé relies on peer pressure to ensure that the customers pay their debts. Nestlé experiences very low default rates (68).

When an organisation wants to target the BoP, the channel component can become very labour-intensive. By using direct sales methods, employing people in the community, many of the middlemen can be bypassed.



Capitec used some interesting techniques to overcome the constraints that an organisation faces with reaching the BoP population.

Capitec Case Study: Channels Component

The constraints that Capitec faces in getting products to its customers are bad infrastructure, information poverty, and proximity and time constraints. The core requirement that Capitec has identified for the Channels component (65) is **Accessibility**. Customers must be able to reach their branches, and they must know about the product. Capitec's core requirement Accessibility corresponds with the Awareness and Availability components of the 4 A's.

Therefore, Capitec has provided a wide network of branches. They have increased the number of branches and decreased the size. By situating the branches close to each other, customers can be targeted more precisely.

Transactions can be done in the branches, at an ATM, or through retailers (64). Customers can draw money at retailers (Pep, Shoprite, Checkers, Pick 'n Pay) that cooperate with Capitec.

Capitec has also introduced longer banking hours (63). They have realised that the BoP customers don't have the luxury of flexible time. Capitec has broken conventional practices by increased accessibility.

Capitec ensures that its services are accessible by locating bank branches where the BoP needs them (65), namely:

- Taxi ranks
- Train stations
- Townships
- Rural centres

It is a difficult task to make the BoP aware of a new product, because often they don't have access to the traditional marketing infrastructure, such as TV, radio and print media. In the beginning, Capitec used no above-the-line marketing (65). They relied on word of mouth and sent marketing "hit squads" into townships to distribute leaflets and information. They also did brand awareness campaigning in and around the townships. Capitec sponsored events like union meetings and graduations in their target areas.

Capitec makes use of mobile stations that fit in a suitcase. These stations include a laptop with Internet connection, a camera, a fingerprint reader and card swiper. Capitec's sales team would go to factories and other organisations, bringing the bank to the people. They would help the workers open accounts (65) in a non-threatening environment.

The two main tests that the Channel component of an organisation must pass to minimise the risk of failure in the BoP are:



Is the BoP AWARE of the product/service and is it AVAILABLE in an affordable form when the customer wants it?

Failing the tests

If the organisation fails the test, it has to go back and rethink the component to come up with a new solution. If it does not manage to resolve the problems that keep it from passing the test, the business model might not be feasible, and the organisation must carefully consider whether it wants to continue with designing the business model. By finding warning signs and problems early and either overcoming those problems or discontinuing the design of the business model, risk of failure can be minimised.



7.3.4 Customer Interface

When the Value Proposition and the Channels have been designed, an organisation must focus its attention on the Customer Interface (Figure 48). The interface is the connection and interaction between the organisation and the customer.



Figure 48: Customer Interface step

The Customer Interface component of the business model shows the way the organisation connects and interacts with the customer.

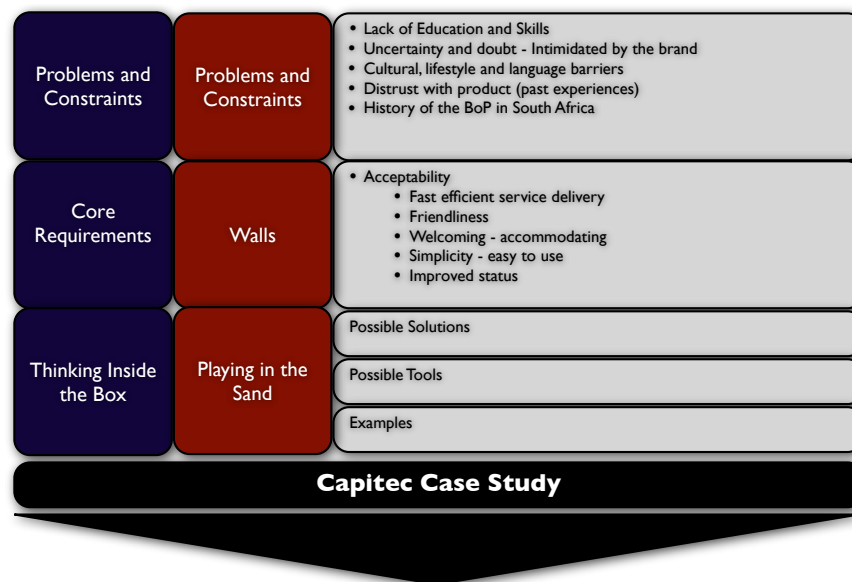


Figure 49: The Innovation Sandbox Process for Customer Interface



Figure 49 shows the process and structure that will be followed to explore the Customer Interface component of the Business Model Development Strategy.

1) Problems and Constraints

The BoP is afraid of the humiliation that poverty brings. They are often intimidated to go into shops and purchase products because of potential embarrassment as a result of their lack of proper clothing, money, etiquette and skills/education.

In the past, organisations have not considered the BoP valuable customers, and hence have disregarded them. This left the BoP marginalised, and left them with a feeling of distrust and an element of suspicion for business (15). The BoP didn't have the benefit to change brands when they were not satisfied with the service, because there weren't many other options available. This made the BoP feel vulnerable and dependent on big organisations. They had no control, which made them feel inferior.

2) Core Requirements

The Customer Interface component must be designed to ensure easy and convenient interaction between the customer and the organisation. **Acceptability** is the most important function of the interface. The customer interface must be welcoming and friendly, to make the BoP feel like valued customers. Individuals at the BoP are often first-time users who are intimidated by difficult and long procedures, therefore the learning curve cannot be long or arduous, and simplicity of the interface is important (1).

An inviting storefront can go a very long way in attracting the BoP, because it soothes their fears of being humiliated by their lack of skills and understanding of complex systems and procedures.

Simple interfaces must allow organisations to access complex systems. These complex systems include the Information and Communication Technology (ICT) of an organisation. The Interface component must ensure that the design of the interface is simple and intuitive. The operation and design of the complex system falls under the Key Activity component.

3) Thinking inside the Box

This step looks at possible solutions, tools and examples.

An organisation must develop plans, methods and routines that make the buying experience easier and more enjoyable for its customers. The organisation must be approachable and inviting to ensure that the customers who lack skills and have cultural or language barriers aren't anxious or frightened to approach the shop floor.

The deeply held values of the Aravind Eye Hospital ensure that its culture is about serving the patients with humility, kindness and equality (25). Aravind Eye Hospital does **not show any class distinction**: all people, rich or poor, must be provided with the same world-class service. *"It is not possible to understand the breakthrough innovation without explicitly recognising the importance of deeply held values"* (25). The goal and vision of Aravind is clear and motivating, to ensure that it can be shared with all people in the organisation. The culture at Aravind Eye Hospital is one of humility, service, kindness and equality and mutual respect exists between all members of the organisation.



Capitec Case Study: Customer Interface Component

The customer interface at Capitec is paperless. This means that customers who are illiterate will not be intimidated to open an account and use Capitec's products, because the tellers will assist them personally and fill in the online forms for them. One of the biggest constraints that Capitec faces is the lack of confidence people with limited literacy and education have. Personal care and simplicity is the main focus of Capitec's interface. All their processes are designed to give their customers more control while keeping costs down.

Biometric controls, like fingerprint technology and cameras to take personal photos of each customer, improve security and ease of use (70). The banking hours are extended from 8am to 5pm, allowing customers more flexibility and control to bank when they want (64).

Tellers are selected from the local community and this allows them to understand their customers better (63). Capitec's aim is to serve customers in their own language as far as possible. Tellers don't face customers through 40mm of bulletproof glass. This makes tellers seem more approachable, friendlier and less intimidating.

Capitec tries to define its market by customer rather than by income. Their aim is to be status-neutral.

The big four banks showed a divergence between value and status (65). If a customer looked poor, the tellers treated them with inferiority and disregard, as if they weren't valued customers. The branches in poor communities were different to higher-class branches, because there was an assumption that for examples miners will not mind less flashy branches, as they are used to rough conditions. This view led to great distrust and scepticism in banks. Capitec took a different approach. Personal Service was incorporated and each customer is treated with importance; the tellers are friendly and helpful, and never embarrass their customers.

The main tests that the Customer Interface component of an organisation must pass to minimise the risk of failure in the BoP is:



Is the Customer Interface ACCEPTABLE to the BoP? Do they feel welcome and find the interface easy to use? If yes, move onto the next step, else rethink the Customer Interface!

Failing the tests

If the organisation fails the test, it has to go back and rethink the component to come up with a new solution. If it does not manage to resolve the problems that keep it from passing the test, the business model might not be feasible, and the organisation must carefully consider whether it wants to continue with designing the business model. By finding warning signs and problems early and either overcoming those problems or discontinuing the design of the business model, risk of failure can be minimised.



7.4 Price

The Price component of the business model considers the price that will be affordable to the BoP to enable them to buy the product. It also looks at how an organisation makes money and its pricing model. Figure 50 shows where the Price component lies within the Business Model Development Strategy.

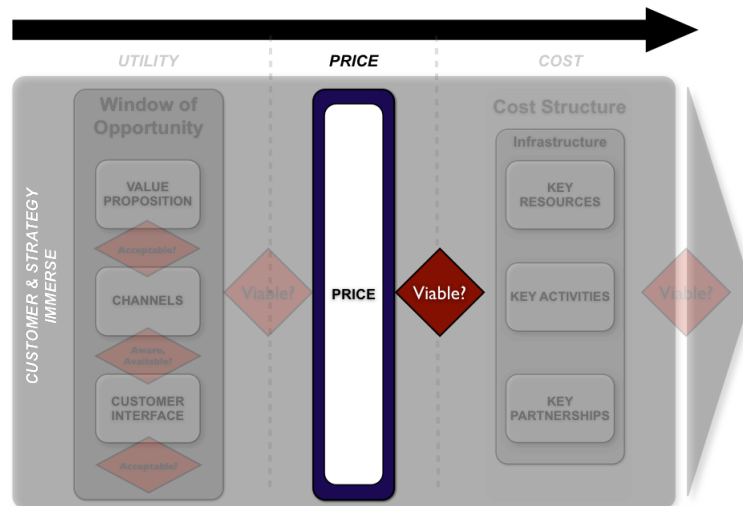


Figure 50: The Price Component within Business Model Development Strategy

The price must also offer the BoP value for money.

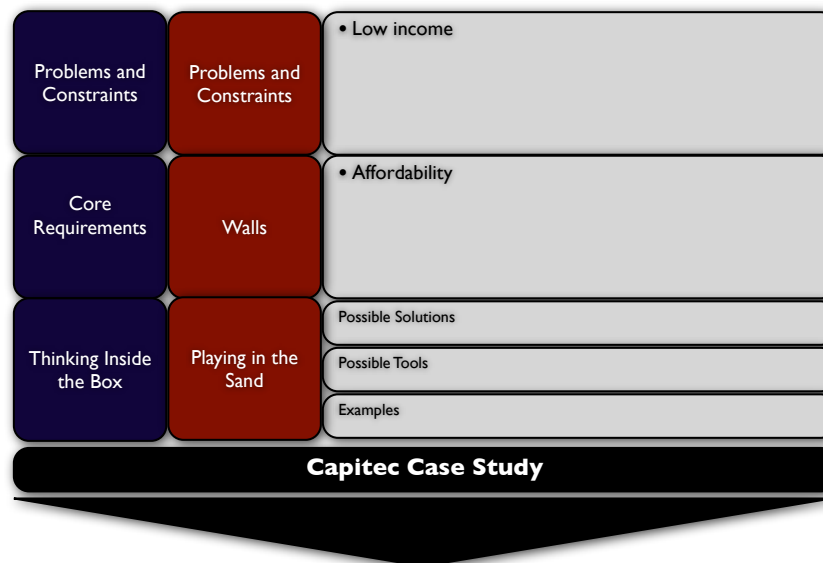


Figure 51: The Innovation Sandbox Process for Price



Figure 51 shows the process and structure that will be followed to explore the Price component of the Business Model Development Strategy.

1) Problems and Constraints

Organisations often want to '*test the waters*' first by targeting those customers who seek new products and are price insensitive. They will launch their products at a high price and then drop it over time to attract the mass of the customers (57). Kim and Mauborgne(49) argue that, from the start, organisations must price their product to capture the **mass of the market**. It is important that organisations determine the price that will allow them to capture a large pool of customers quickly. In the BoP, volume is important because of the small profit margins each purchase offers.

The price an organisation chooses must not only attract the mass market, but also assist the organisation in retaining them (49). The offering must be affordable for the BoP. Many organisations are very vulnerable to imitations and free-riding. Customers must be convinced that they are receiving the best value at the best price in order to remain loyal. Therefore, organisations must offer the customers something they can't resist.

Imitation is a reality when knowledge and ideas are involved, because the leader bears all the costs and risks in developing the new ideas, while the follower can learn from their mistakes (52) and apply the ideas and knowledge to their own organisation.

2) Core Requirements

Kim and Mauborgne (52) propose that the organisation strategically price the product from the beginning to ensure that the mass of buyers are captured. The strategic price and rapid brand recognition built by the organisation will discourage imitators and make it very difficult to catch up to the economies of scale and learning advantages the organisation has gained, and it makes the competition almost irrelevant.

The core requirement that needs to be fulfilled in the price component for the BoP is **Affordability**. The BoP only has limited disposable income and they can only afford to pay up to a certain price.

3) Thinking inside the Box

This step looks at possible solutions, tools and examples

At Aravind the limit of what customers can afford determines their costs. Breakthrough innovators are driven to play more effectively in the rest of the sandbox, redesigning their processes as needed to meet cost requirements. Aravind's eye care was affordable to everyone. They offered different types of price packages and ensured that nobody was ever turned away (25).

Capitec understands the importance of pricing a product correctly for the BoP market.



Capitec Case Study: Price Component

The price Capitec charges for their products must allow them to capture the mass of the market. Because of the low profit margin each customer shows, volume is very important. Capitec's interest rates and transaction fees are significantly lower than at other banks (64). The only bank that gets close to Capitec's fee structure is FNB with their EasyPlan branch. Capitec offers a zero cost on debit card purchases and free cash withdrawals from retailers (59). Their fee structure is simple and they offer a net positive return for their customers, allowing them to grow their money (63).

The main tests that the Price component of an organisation must pass to minimise the risk of failure in the BoP is:



Does the product/service that the organisation offers AFFORDABLE? If yes, move onto the next step, else rethink the Price!

Failing the tests

If the organisation fails the test, it has to go back and rethink the component to come up with a new solution. If it does not manage to resolve the problems that keep it from passing the test, the business model might not be feasible, and the organisation must carefully consider whether it wants to continue with designing the business model. By finding warning signs and problems early and either overcoming those problems or discontinuing the design of the business model, risk of failure can be minimised.



7.5 Cost Structure

Up to this point in the Business Model Development Strategy, the focus has been on attracting large volumes by fulfilling the core requirements of the BoP. But to ensure that an organisation still makes a healthy profit whilst targeting the BoP, they need to keep their costs as low as possible.

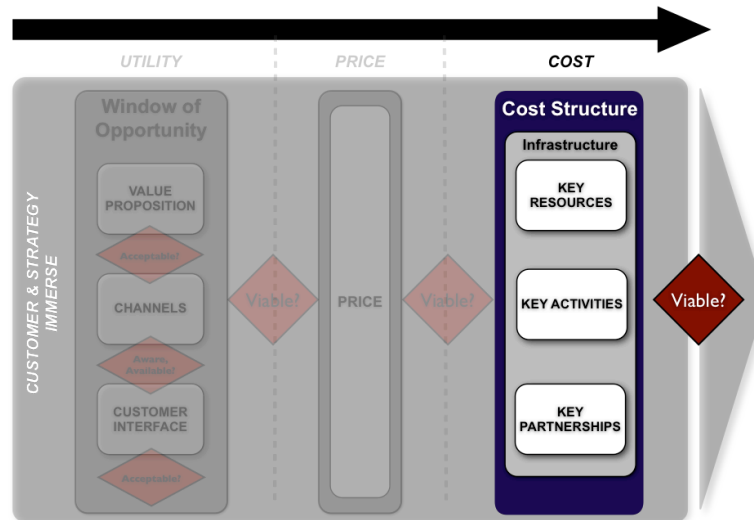


Figure 52: The Cost Structure component

The last four components of the business model for the BoP focus on driving down costs while increasing the value of the offering (Figure 52). There is a very fine line between the key resources, key activities and key partnerships components. These three components (Key Resources, Key Activities and Key Partnerships) comprise the infrastructure of the business model. The roles of the infrastructure components can be blurred, and they must actually work together to ensure that the infrastructural and logistical issues are successfully completed.

The business model for the BoP must be cost- and value-driven. Therefore, all the infrastructure components must cooperate with the cost structure of the business model, and the strategy of driving down cost while increasing value must become an inherent part of each infrastructure component. In this way, the Cost Structure component is incorporated in the three infrastructure components, and is not discussed in much detail.

The Cost Structure component of the business model describes all the costs that an organisation incurs while operating its business model (11). All activities and resources that create value for the customer and generate sales incur costs.

The following three components (the infrastructure components) of the business model have to be designed to assist an organisation in achieving the target cost:

- 6) Key Activities
- 7) Key Resources
- 8) Key Partnerships



When strategic pricing drives the cost structure of an organisation (as is the case with the BoP), the key resources and activities of the business model must be set up from the beginning to be lean and profitable (57). A good business model with a low cost structure is very difficult to imitate. Kim and Mauborgne (57) argue that when organisations are basing *“their cost targets on the market-driven strategic price and refusing to allow overruns, they force their organisation to question virtually every assumption about materials, design, and manufacturing – often with surprising results”*. The lower the costs that an organisation faces, the higher its profits.

Organisations can reduce costs by using smaller or more affordable packaging, or scaling down on existing products, while still offering exceptional value. Cost reductions are an absolute necessity, and sometimes it is enough to reach the cost target. But often this is not the case. An organisation must find creative ways to meet the target cost. Kim and Mauborgne (49) show that organisations have three principle levers that they can use to hit their cost targets:

- Pricing model (changing the pricing model: how products/services are priced). The aim of changing the pricing model is not to jeopardise the strategic price but to reach the target costs.
- Key resources and key activities (streamlining and cost innovations)
- Key partnerships

The constraints for the infrastructure requirements at the BoP are similar to the constraints that other sections of the economic pyramids face: driving down costs while not compromising environmental quality, and the value and quality of the product.

Capitec is a good example of an organisation that managed to keep the costs low enough to make a very good profit.

Capitec Case Study: cost Structure Component

Capitec doesn't keep cash on the premises, which allows them to reduce costs by having less security and no bulletproof glass (64). The central system, which enables branches not to have a back office, saves money. Capitec reduces costs by keeping its branches simple and collaborating with partners that do have the necessary infrastructure (63).

The Key Resources of an organisation must be re-examined to ensure that costs are minimised while the value of the Value Proposition is maintained.



7.5.1 Key Resources

The Key Resources component is part of the Cost Structure (Figure 53).

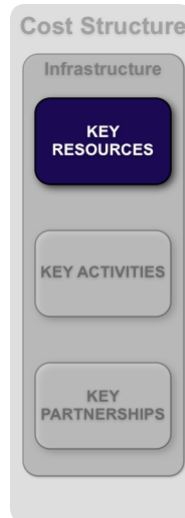


Figure 53: Key Resources step

The Key Resources component of the business model must consider how an organisation can reduce the total costs of resources it uses in its products, processes, practices and premises. The resources in an organisation can be qualified as follows (11):

- **Physical:** physical assets, such as property, distribution systems, equipment and vehicles
- **Financial:** investments, lines of credit, stock and cash
- **Intellectual:** brands, patents, copyrights and customer databases
- **Human:** the employees of the organisation

The key resources component considers all the resources that the other components of the business model need and demand.

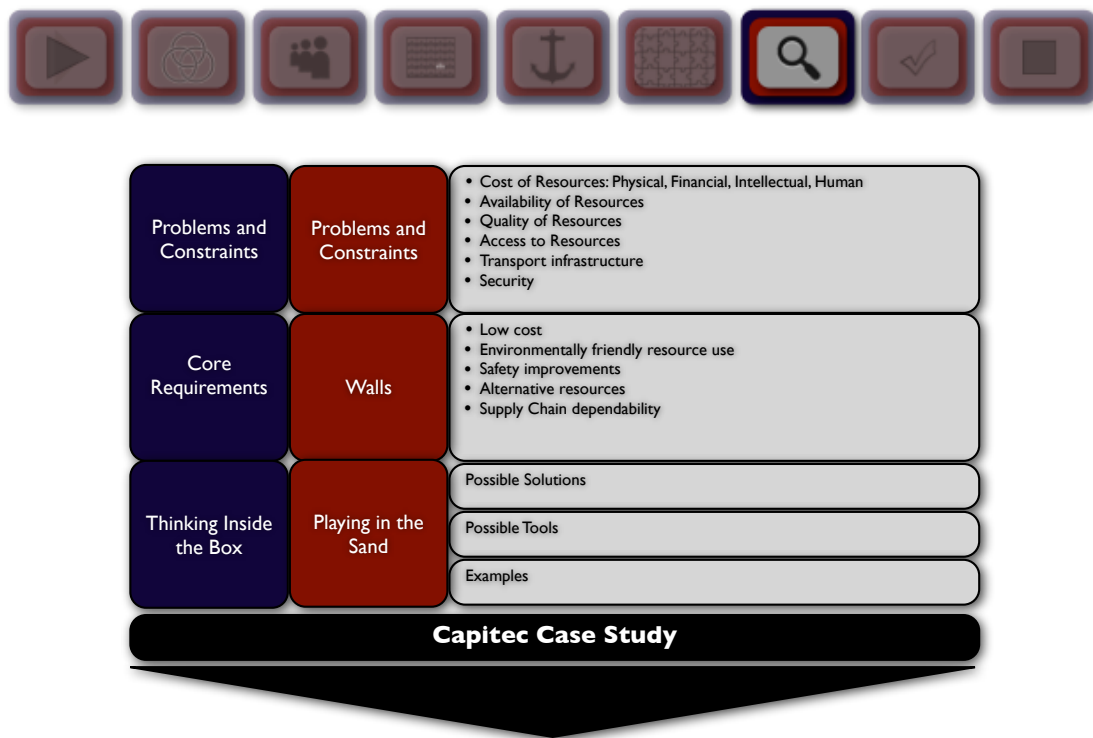


Figure 54: The Innovation Sandbox Process for Key Resources

Figure 54 shows the process and structure that will be followed to explore the Key Resources component of the Business Model Development Strategy.

1) Problems and Constraints

There are many constraints that can push the cost of resources up and can harm the environment. The following are some examples:

- Availability of resources in isolated locations may be limited.
- Quality of resources: when an organisation wants to cut costs, the quality of the resources might suffer.
- Access to resources: bad infrastructure can increase the difficulty and cost of reaching some resources.
- Transport: the long distances that have to be travelled to get the products to the BoP can increase costs.
- Security: security costs can be very high in some remote, isolated areas.
- Risk: insurance costs can be high for products and premises that are situated in remote and isolated areas.
- Lack of resources: sometimes the necessary resources are hard to come by.

These constraints must be overcome by fulfilling the core requirements of the BoP.

2) Core Requirements

High resource prices increase the cost of the product/service, and lead to lower profit margins. The resource intensity of organisations must be reduced and alternative or more affordable, renewable resources need to be used without compromising quality. All the assumptions an organisation has about



resource use from the manufacturing to distribution activities need to be questioned. Typical questions to challenge assumptions are (49):

- Can the raw materials of the product or service be replaced by unconventional, less expensive ones?
- Can the physical location of the product or service be shifted from prime real estate locations to lower-cost locations?
- What are the most expensive resources and how can they be decreased?

Organisations must find solutions that use the resources in the most effective way and consider alternative and renewable materials to minimise the effects of waste and pollution on the environment.

3) Thinking inside the Box

This step looks at possible solutions, tools and examples.

High resource prices increase the cost of the offering, and lead to lower profit margins. Therefore, the organisation must find ways to decrease resource costs while not compromising the environment and the value and quality of the product.

The Four Actions Framework (Chapter 5.1.3) is an effective tool to streamline the activities and resources and find cost innovations. It can help an organisation understand which resources are most expensive and need to be replaced, reduced or eliminated. Organisations must also identify scarce resources that can be very hard to come by; these resources will have an influence on value proposition availability and hence a negative impact on the brand.

The 12 Principles of Green Engineering, discussed in Chapter 2.3, can be very useful principles to help organisations reduce resource use (energy and materials) and costs, while at the same time not harming the environment.

Some possible solutions to reduce resource use are:

- Leasing and sharing infrastructure resources can reduce costs. This solution overlaps with the Key Partnership component. All three infrastructure elements (activities, resources and partnerships) will deal with aspects of a solution like this.
- Using local people for distribution and marketing
 - Training local people generates further reach
 - Intermediaries can be secured by building up networks
- Specialisation
 - Make more effective use of resources
 - Specialise people, training, work process design, capital, equipment and requisite investment of time and skill
 - Combine specialisation with volume
 - Build expertise
- Build brand identity
- Make special deals with suppliers



- Make use of capital intensity
 - Reduce capital intensity by using resources efficiently and effectively around the clock
 - Generate off-peak incentives
 - Pattern of resource use
- Talent Leverage
 - Skills development instead of credentials
- Eliminate, reuse, reduce, recycle
 - Reduce resource intensity
 - Conserve resources

An example that illustrates how specialisation can be used to decrease costs is Aravind Eye Hospital, which specialises in eye care. By means of specialisation, an organisation can use its resources (people, work process design, training of employees, capital equipment) more effectively, and its time and skills can be invested more productively. Specialisation also allows organisations to build real expertise and develop a unique brand identity. Aravind was successful because it specialised in eye care, built a good reputation for eye care procedures, and hence attracted many patients (25).

Casas Bahia, a Brazilian retail chain, made special deals with its suppliers. The organisation managed to negotiate large volumes at low prices. Its distribution centres are strategically centred to ensure that delivery is efficient, because successful on-time delivery of a product can be the reason why a customer would buy from Casas Bahia again in the future (1).

Most of the employees at Aravind Eye Hospital were trained at the hospital. This approach saved money and ensured that the organisation's staff is at the desired standard. The more involved an organisation becomes in building the skills of their employees, the more effective it can be at providing world-class products and services while keeping costs down (25).

Capitec managed to cut on resource use by eliminating paper from their processes, among other undertakings.

Capitec Case Study: Key Resources Component

Technology is the cornerstone and most important resource of Capitec. Technology drives their costs down while increasing customer value. They save costs on infrastructure by using Windows servers instead of UNIX or mainframes (70). Staff is trained internally to ensure that the standard is high and it reduces costs (64).



The main tests that the Key Resources component of an organisation must pass to minimise the risk of failure in the BoP is:



Are alternative resources and methods being considered to reduce resource use? Are the resources that the organisation uses friendly to the environment?

Failing the tests

If the organisation fails the test, it has to go back and rethink the component to come up with a new solution. If it does not manage to resolve the problems that keep it from passing the test, the business model might not be feasible, and the organisation must carefully consider whether it wants to continue with designing the business model. By finding warning signs and problems early and either overcoming those problems or discontinuing the design of the business model, risk of failure can be minimised.



7.5.2 Key Activities

The Key Activity component is part of the Cost Structure (Figure 55). It describes all the activities organisations complete to ensure that the business model operates effectively and efficiently. The Key Activities component includes all activities in the value chain from design, manufacture to distribution, and any other activities that are necessary to operate the business model. Organisations that operate in the BoP must be cost- and value-driven, and hence the key activities that the organisation runs must reflect this.

The Key Activities component is about internal operations and is not influenced by major external factors. External factors like water, electricity, cost of materials and the workforce fall under the Key Resources component of the business model. When an organisation outsources operations, it falls under the Key Partnership component. The Key Activities component looks at good organisation, workflow, control and innovative ways to make all systems and processes operate more effectively and efficiently. It looks at how an organisation designs its processes and systems to get the best results.

Key Activities can also include the Information and Communication Technology (ICT) that an organisation uses. This is the software system, databases and any other support mechanisms the organisation uses to assist the customer interface and all customer processing. It happens behind the scenes. Organisations need intricate, comprehensive systems that make the interface easy to use for their customers and will save time and money. The ICT must also be designed to keep the needs of the BoP in mind. The technical side of the ICT falls under the Key Activities, while the interface design (how the customer interacts with the ICT) is a combined effort of both the Key Activities and Customer Interface component.



Figure 55: Key Activities step

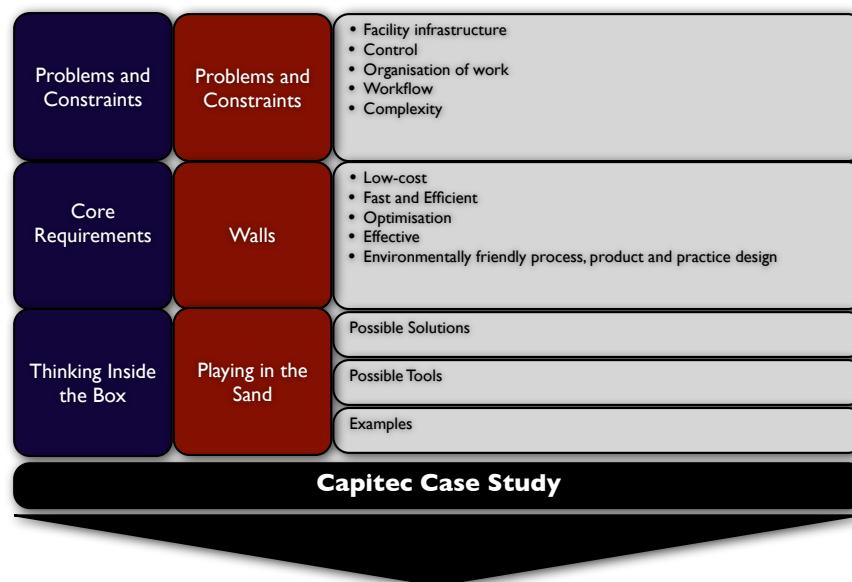


Figure 56: The Innovation Sandbox Process for Key Activities



Figure 56 shows the process and structure that will be followed to explore the Key Activities component of the Business Model Development Strategy.

1) Problems and Constraints

The biggest constraint that organisations have to overcome when designing the Key Activities for the BoP is to keep everything low-cost. The higher the costs are, the less profit an organisation will make. When an organisation drives down cost, it is important that it does not compromise on value.

Some constraints that organisations face when they try to decrease the cost of their key activities in the BoP are:

- Complexity
- Infrastructure
 - Electricity
 - Water
- Skills, education and know-how of employees
- Organisation of work
- Poor quality of facilities and equipment
- Control
- System down-time
- Complex systems

These constraints differ for each organisation and must be identified after careful consideration.

2) Core Requirements

The two main core requirements for the Key Activity component are low-cost and value. This can be achieved by designing key activities that are fast and efficient. The higher the costs, the less profit the organisation makes.

The organisation must figure out what the biggest bottlenecks in its Key Activities are that slow down operations, because time is money.

The Key Activities component must be designed to fulfil the core requirements that the organisation has identified.

3) Thinking inside the Box

This step looks at possible solutions, tools and examples.

All the assumptions an organisation has from design, manufacturing to distribution activities need to be questioned. Typical questions that can be asked to challenge assumptions are (49):

- Can high-cost, low-value-added activities in the value chain be significantly eliminated, reduced or outsourced?



- Can the number of parts or steps used in production be truncated by modifying the way things are made? Can activities be digitised to reduce costs?

An organisation's key activities must be streamlined by using methods that make the system more effective and efficient, and reduce costs. The Four Actions Framework (Chapter x) is an effective tool to streamline the activities and find cost and value innovations. The organisation must aim to make its whole value chain fast and effective, while reducing costs. Organisations must figure out what the most expensive and inefficient activities are. Time-consuming and laborious activities drive up costs, and must be eliminated or reduced.

The 12 Principles of Green Engineering, discussed in Chapter 2.3, can be very useful principles to help organisations design the Products, Processes, Practices and Premises (4 P's of business design in Chapter 2.3), to reduce resource use (energy and materials) and costs, while at the same time not harming the environment.

It would have cost Aravind Eye Hospital \$60-\$100 to import intraocular lenses that they use in cataract surgery. Producing these lenses themselves costs only about \$3, and the quality is so good that they started exporting them to the USA and other countries. Breakthrough innovators like Aravind are willing to pay higher fixed costs, if it means that their variable costs will be lower over the long run. When an organisation specialises, only the relevant equipment for eye care and similar opportunities need to be financed. Innovators seeking breakthrough cost reductions must focus on reducing capital intensity by using equipment around the clock and generating off-peak incentives (25).

Some tools and methodologies that organisations can use to reduce cost and increase efficiency are:

- Lean Manufacturing
- Six Sigma
- Process innovation
- Redefine process to fit infrastructure
- Building and designing activities and processes that are sensitive to the prevailing conditions
- Workflow
 - Process design
 - Dismantle and reassemble
 - Solutions must be scalable and transportable across countries, cultures and languages
 - Transfer know-how and skill
 - Duplicate process and activities
 - Use specific, rare skills and talent only for difficult jobs
 - Use backup personnel to do administration
- All team members must fully understand their responsibilities
- Specialisation
- Talent leverage

At Aravind Eye Hospital, the surgeons specialise in procedures while the rest of the team is responsible for the other outcomes. A surgeon moves from one operating table to the next, focusing on the procedure, while the nurses take care of the patients and paperwork. Surgeons focus on what they do best and employees trained by Aravind handle all the administration. **Process design** is critical: the



quality of the outcome depends on the sophistication with which the total tasks have been dismantled and reassembled, and how specific skills and credentials have been applied. By using specific, rare talent and skills only for the difficult jobs and using a backup team to do the administration, Aravind saves time and money. Each member on the team knows exactly what to do (25).

Capitec has managed to design their processes very effectively.

Capitec Case Study: Activities

Behind the scenes, at the heart of Capitec's operations, is a very centralised system in a centralised location. Capitec has developed a computer system that facilitates paperless and cashless transactions. The computer system is process-driven and decreases the cost and effort of banking (63). Capitec uses Windows, which is a scalable and stable system. This means that there is less risk of system failure.

Capitec uses biometric control, photos and fingerprint technology to identify its customers. It allows Capitec to reduce costs, administrative requirements and limits the possibility of fraud.

Branch costs are minimised by having a cashless bank (64). Only deposits involve cash and go straight to the drop safe. The rest of Capitec's operations are cashless. Cash can only be drawn from ATMs or retailers, but not over the counter. Therefore, branch staff doesn't have to worry about looking after cash and they can give their customers more personal attention. Security needs and costs are also decreased.

The main tests that the Key Activities component of an organisation must pass to minimise the risk of failure in the BoP is:



Are the Key Activities optimised, effective and efficient so that the cost is as low as possible while not compromising quality? Are all products, processes, practices and premises designed to keep the environment, low costs and efficiency in mind?

Failing the tests

If the organisation fails the test, it has to go back and rethink the component to come up with a new solution. If it does not manage to resolve the problems that keep it from passing the test, the business model might not be feasible, and the organisation must carefully consider whether it wants to continue with designing the business model. By finding warning signs and problems early and either overcoming those problems or discontinuing the design of the business model, risk of failure can be minimised.

7.5.3 Key Partnerships

The Key Partnership component is part of the Cost Structure (Figure 57) of the business model and describes the network of partners and suppliers the organisation needs to make sure its business model works most effectively.

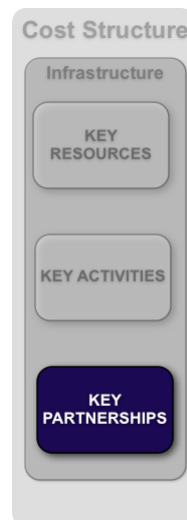


Figure 57: The Key Partnership step

Many organisations try to do all the manufacturing and distribution activities themselves. Organisations must realise that they are not the best at everything and rather look outside to organisations that can fill the gaps that exist in their capabilities. They can do this by partnering and acquiring. Certain capabilities can be secured quickly and effectively through partnering. Organisations that want to target the Bottom of the Pyramid population must collaborate and enter in partnerships; they must not operate in isolation. Other organisations' expertise, distribution channels and economies of scale can be leveraged (49). An organisation needs to answer the following questions to ensure that it gets the best capabilities (57):

- What are the capabilities that an organisation needs to achieve its value proposition and, of those, which capabilities does the organisation lack?
- Do any other organisations have those missing capabilities?
- Should an organisation acquire or partner with other organisations to increase cost quality and speed?

There are many problems that exist with partnering in the BoP.

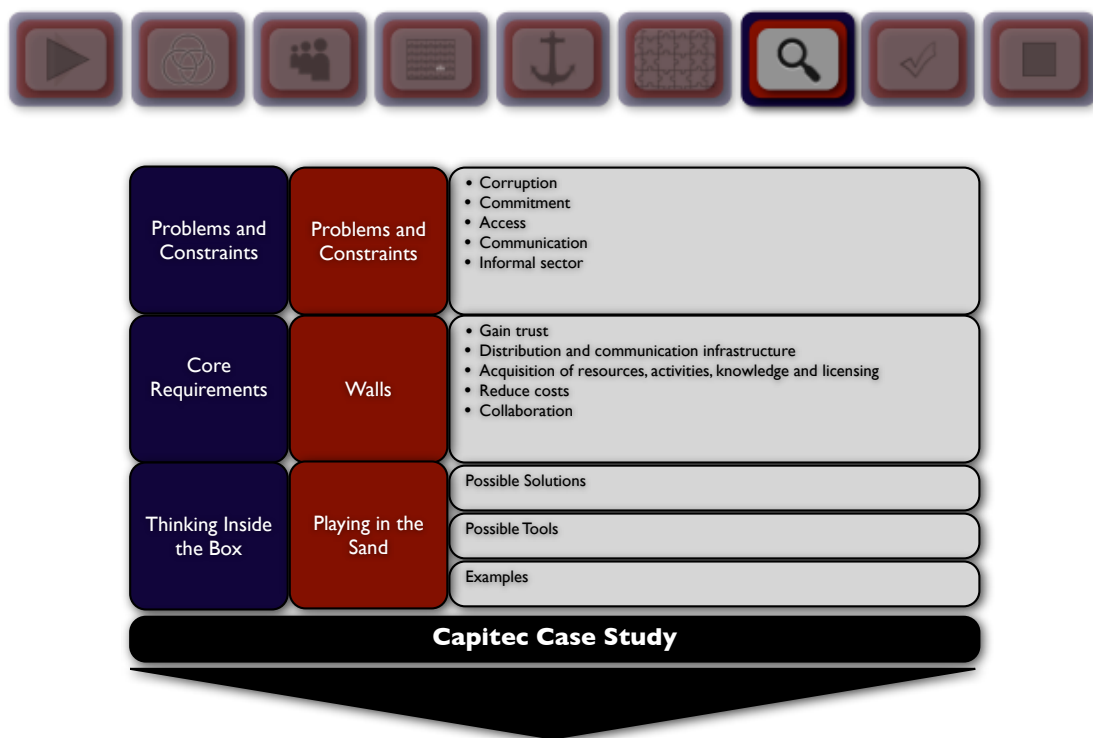


Figure 58: The Innovation Sandbox Process for Key Partnerships

Figure 58 shows the process and structure that will be followed to explore the Key Partnerships component of the Business Model Development Strategy.

1) Problems and Constraints

Trust and correct capability assessment by the organisation of the partner are some of the biggest problems that organisations face when entering partnerships. Issues at the BoP, such as corruption, difficult access because of distrust of the BoP, weak community organisations, not completely understanding the difference between local practice and corruption, and poor communication, can make market entry very difficult for organisations.

2) Core Requirements

When an organisation enters into a partnership, both parties must gain value from the transaction. It is very important that the whole process be transparent and consistent to ensure that trust and commitment is gained. Organisations must figure out which partnerships will add value to the organisation, and how they will do it while reducing costs. The core requirements for a partnership are that it improves efficiency, access and value while reducing costs.

The Innovation Sandbox Process shows the constraints and core requirements organisations must fulfil to enter into successful partnerships.

When an organisation enters into a partnership, they must remember that they are dealing with other people and might lose control of the process.



3) Thinking inside the Box

This step looks at possible solutions, tools and examples.

Other organisations' expertise, distribution channels and economies of scale can be leveraged (49) to help an organisation reach its targets. An organisation needs to answer the following questions to ensure that it always has the best possible capabilities (57):

- What are the capabilities that an organisation needs to achieve its value proposition and, of those, which capabilities does the organisation lack?
- Do any other organisations have those missing capabilities?

Organisations can use their partner's routes for distribution. They can partner with schools and NGOs to achieve better access. The Four Actions Framework (Chapter 5.1.3) can help organisations identify their weaknesses and either outsource or partner to gain those capabilities.

Capitec Case Study: Key Partnerships Component

Capitec uses existing infrastructure where possible. They have increased their reach by collaborating with retailers like Pep, Pick'n Pay, Shoprite and Checkers (64), and using their infrastructure. They have extended their network of places where their customers can draw money without large infrastructure investments. It is a win-win situation: the retailers can reduce their risk and cost of transporting and storing their cash (63). Capitec encourages their customers to draw cash from retailers by keeping their drawing fees low. They charge zero transaction fees for all debit card purchases at all retailers. It is also a secure way of making transactions in spaza shops in rural areas.

Furthermore, Capitec has collaborated with MasterCard to develop cards that have technology allowing customers to use their cards even if they are in remote areas, improving accessibility of the banking service.

The main tests that the Key Partnerships component of an organisation must pass to minimise the risk of failure in the BoP is:



Are all the possible partnerships considered that can assist an organisation in cutting costs and improving efficiency and reach?

Failing the tests

If the organisation fails the test, it has to go back and rethink the component to come up with a new solution. If it does not manage to resolve the problems that keep it from passing the test, the business model might not be feasible, and the organisation must carefully consider whether it wants to continue with designing the business model. By finding warning signs and problems early and either overcoming those problems or discontinuing the design of the business model, risk of failure can be minimised.



And then, for the final test for the Cost Structure:



Can the organisation reach the Target Cost using Key Activities, Key Resources and Key Partnerships? If yes, the idea and business model is viable!



7.6 Chapter Summary

The purpose of this chapter was to develop the content of the Business Model Development components in a systematic process to fully understand their significance and substance, and how they contribute to the whole.

Each component was analysed by first identifying the main problems and constraints the BoP and organisation faced, then determining the core requirements that have to be fulfilled in order to enter the BoP market successfully. Then, the possible solutions, tools and examples were discussed that overcome the constraints and satisfy the core requirements. Finally, the last step was a case study on Capitec that demonstrates the steps the organisation took to fulfil the core requirements of the BoP.



Validation



In this chapter, the research will be validate using a case study and an expert analysis



8 Validation

In this thesis, the term “validation” is used to denote the process of proving the accuracy of the Business Model Development Strategy. Due to the nature of the research undertaken, practical testing and implementation of the Business Model Development Strategy (BMDS) is not practical or feasible. It can take many years to implement the BMDS and even then the success of implementation will depend on many factors that are outside the control of the author/implementer.

The validation of this research was done by using:

1. A case study of Capitec Bank Ltd:
 - Capitec Bank has managed to successfully expand and target the BoP, by following logic that is very similar to the BMDS. The full case study is described in Chapter 7.
2. Expert analysis
 - The analysis takes the form of an interview-based assessment, with five experts from fields that are applicable to this study, to determine from the interviewees’ perspective whether the research is rational and could be successful. Each expert has different areas of knowledge and backgrounds, and focuses on the validity of different aspects of the research.

Both the case study and the expert analysis provided great input and feedback that was used to shape and modify the Business Model Development Strategy, as well as the context in which it must operate, namely the BoP population.

The process that was followed to complete the validation is shown in Figure 59:

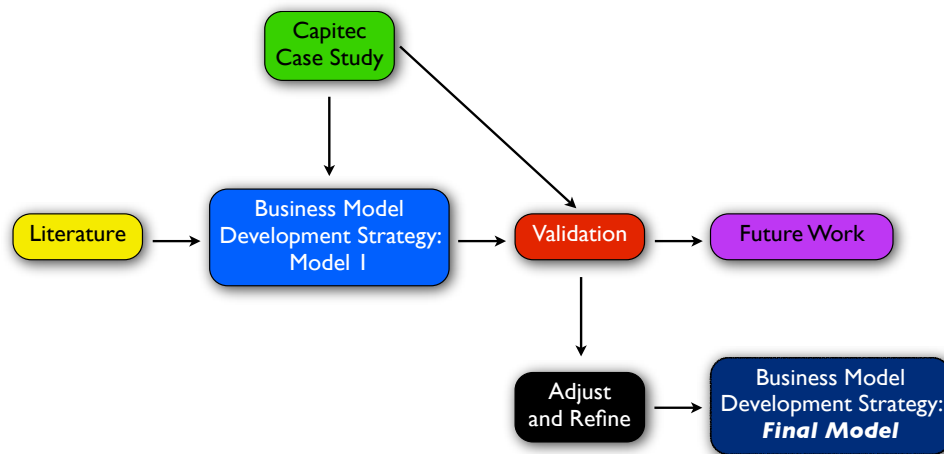


Figure 59: The Validation Process

The Business Model Development Strategy was developed from literature and the lessons learned from the Capitec case study (Chapter 6). This model was then presented to the experts, who gave feedback and input. Finally, the framework was adjusted and refined to incorporate the feedback and input from the experts. Some future work was also determined from the validation.



8.1 Capitec Bank Case Study

8.1.1 Background

Capitec has managed to target the BoP market successfully. It has designed its products, processes, practices and premises in a way that is acceptable to the BoP and managed to draw a large volume of customers. Its marketing, distribution and product design is innovative and often go against conventional wisdom.

The case study shows the practical examples that Capitec uses to successfully target the BoP, and the logic behind these actions. The case study, discussed in Chapter 7, is divided into the relevant components of the Business Model Development Strategy.

The basis of the Business Model Development Strategy was developed using the literature presented in Chapters 2-5. The case study was used to shape and modify the BMDS in a way that reflects the real world. During the development of the BMDS, the lessons learned from the Capitec case study were incorporated into the framework to make it more practical.

8.1.2 Lessons Learned from Capitec Bank

Capitec Bank has overcome some of the constraints organisations face when targeting the BoP, and learned lessons about the BoP market and how to target it (refer to the case study in Chapter 7). These lessons include:

- **The core requirements.** The 4 A's (Acceptability, Availability, Awareness and Affordability) is a generic version of Capitec's own core requirements (Simplicity, Personal Service, Accessibility and Affordability), which it customised for the target market. This shows that organisations must personalise the core requirements to their market's specific needs.
- **Immersion into the BoP.** The founders of Capitec walked the streets of many townships, engaged with the people, gained insight into their lifestyles, found out what the constraints were and why they don't use certain products. The lesson is that it is very important to start with the customers, to have a user-centric approach, and really understand their needs.
- **Inclusion of the BoP in the target market.** Capitec doesn't target the BoP exclusively; they include them in their overall target market. If an organisation chooses to target the BoP exclusively and failed to include the middle- and upper-class markets, it would limit itself by decreasing its possible market share, which would translate into less volume. Volume is very important, because of the small profit margin each customer offers.
- **Understanding the customer.** The case study helped give insight into the typical customer of the BoP. Before opening its first branches, Capitec did a lot of research on the needs and desires of the BoP population. What it found was that the BoP lacks confidence and is intimidated by complex procedures or any situations that would make it feel uncomfortable. Capitec developed each of its products and processes to be as simple as possible and thus ensured that their customers are not embarrassed. The interface between the organisation and the customer must be open, friendly and inviting.
- **Equal treatment of all customers.** The BoP customers wanted to feel like they are valued customers. For example, other banks tended to make mineworkers in overalls feel small and menial, and the tellers treated them with inferiority and disregard, as if they were not valued



customers. All of Capitec's bank branches are similar and customers are always treated with respect.

- **Status.** The BoP values products and services that give them status in their society. Being associated with the Capitec brand and treated as a valued, respected customer, gives customers a certain level of status.
- **Control to the customer.** In the past, the BoP customers had a sense of distrust in banks, because they felt that they lost control as soon as they deposited their money. This was because the products were complex and difficult to understand and they had to rely on the bank staff to explain the products to them. Simplicity is the key to Capitec's products and processes. They make sure that even customers with a low level of skills and education can use their products. They empower their customers in negotiation and give them the control to make informed decisions about the fate of their fortune.
- **The customer component.** The case study assisted in refining the steps an organisation must take in the Customer component in the business model. That component was constructed using Blue Ocean theory and practical examples from the approach Capitec took to understand its customers.
- **Simplicity.** Simplicity does not mean poor quality. Simplicity focuses on making products and services easier to understand and use. Capitec has simplified its products and services to accommodate the BoP.
- **Access.** Capitec's branches are situated at locations that are easy to reach for the BoP. Capitec has also increased the number of branches and decreased the size of each branch. Branches are located at taxi ranks, train stations and business centres.
- **Affordability.** Capitec has made its products more affordable by cutting out excess services, centralising its administration centre and partnering with retailers.
- **Personal Service.** Capitec treats each customer with respect and dignity, and ensures that each customer is valued.
- **Value.** Capitec offers its customers great value. It added functionality of products and services while it decreased the price.
- **Focus.** Capitec's focus is on core banking for the individual. This is a need that all levels of the pyramid have.
- **Divergence:** Capitec distinguishes itself from other banks through, for example:
 - **Price**
 - **Banking hours**
 - **Only one bank account option**
 - **Simplicity**
- **Compelling Tagline.** Good value and simplicity.
- **Commonalities.** Capitec offered its customers a basic account with the full functionality of core banking. These are the expectations that all customers have in common, no matter where they are situated in the economic pyramid.



These lessons have added value to the Business Model Development Strategy and the understanding of the BoP. The 'Expert Analysis' was conducted to measure the research against the knowledge, experience and logic of the experts.



8.2 Expert Analysis Validation Process

Testing the validity of the research in an expert analysis ensures that logical flaws and problems are uncovered. The goal of each interview was to find out to what extent the experts agreed with different aspects of the BMDS. They had to give motivations and recommendations for their answers.

8.2.1 Interviewee Summary

Table 13 gives a summary of the background/occupation of the experts that were interviewed, and the reasons why they were included as experts.

Table 13: Interviewee summary

Name	Background/Occupation	Reason for Inclusion
Dr Eric Lutters (EL)	Associate Professor of 'Management of Product Development' at the University of Twente in the Netherlands.	Knowledge on Enterprise Engineering, Business Model design, and Strategy, as well as sustainable/rational design. More than a hundred Student Projects and more than ten PhD projects on Enterprise Engineering and Business Model Design; Consulting work in Strategy and more than ten MSc projects. Membership of Strategic Advisory Boards of four companies.
Graham Lee (GL)	Currently Head of Business Intelligence at Capitec Bank; Member of Capitec Bank's Executive Management Committee; Chartered Accountant	Knowledge of business models for the BoP. Contributor to Capitec's business Model. Knowledge on Strategy and the BoP. Capitec is currently targeting the BoP market successfully.
Servaas de Kock (SdK)	Lecturer in Strategic Management, Business Studies and Design at various tertiary institutions. Consultant after 25 years in the banking industry (ABSA).	Knowledge of Strategy (as General Manager of Absa bank), BoP (was part of strategy development in Absa Bank to penetrate the BoP market in South Africa) and Business Model design (Consultant in firm restructuring).
Professor. Niek du Preez (NdP)	Founder of the Enterprise-wide Innovation Management Company, Indutech (Pty) Ltd in Stellenbosch.	Knowledge in Enterprise Engineering, Business Models and Innovation. Emeritus Professor in Enterprise Engineering at the University of Stellenbosch.
Van der Spuy Brink (VDSB)	Owner/manager of a consultancy: CorvusDreammaker.	Knowledge of Strategy MBA lecturer at Unisa SBL on strategy for the past seven years. Strategy consultant for the past four years: conducted more that 100 sessions with different big and small companies. Worked in the mining industry for two decades.



The validation process is as follows:

1. A **document** was given to each expert with a summary of the research (Appendix A).
2. The author gave a short **presentation** to the experts to provide them with further details.
3. The research was discussed and a **questionnaire** was filled in during the survey (Appendix B contains the survey questions).

8.2.2 Document

Each expert was given a summarised 25-page document that showed the theories and methodologies that were used to build the BMDS, as well as an explanation and description of the BMDS. This document gave the interviewee some background on and a basic understanding of the topic. Appendix A shows Evaluation document that was given to the experts before the interview to familiarise them with the research.

8.2.3 Discussion and Presentation

The author had a meeting with each of the interviewees where a slideshow was presented and the topic was explained in more detail. All questions and queries from the experts were discussed and answered.

8.2.4 Survey Questionnaire

The experts were given a questionnaire to fill out. The questionnaire was filled out as the questions and research were discussed.

The questionnaire was drawn up to support the research questions of the thesis, which were established in Chapter 1.2.1. The research questions are:

-
- 1) Is the **Bottom of the Pyramid (BoP)** a viable market? (**RQ1**)
 - 2) What are the reasons why organisations struggle to expand into the BoP population successfully? (**RQ2**)
 - 3) Is Sustainable Development necessary when targeting the BoP? (**RQ3**)
 - 4) What strategy must an organisation follow to successfully target the BoP? (**RQ4**)
 - a) What must the arrangement of the business model and approach of an organisation be in order to target the BoP?
 - b) What is the content of the Business Model Development Strategy components?
 - 5) How can the business model be designed to minimise the risk of failure? (**RQ5**)
-

Research question 4) consists of two main parts: **4a)** looks at the configuration of the business model (the arrangement of the business model components in a particular order, form or combination) into the Business Model Development Strategy. It considers where an organisation must start targeting the BoP and what its first steps are. This part answers questions about the business model and blue ocean strategy.

- Configuration: How the business model and the Blue Ocean Strategy are combined into the Business Model Development Strategy and whether this process is logical and viable

4b) looks at how an organisation approaches the BoP. It also focuses on the content of the components rather than the way in which they have been arranged.

- Approach: What must be the content of the components of the Business Model Development Strategy, and what would be the most successful method to satisfy the needs of the BoP?



Table 14 shows the structure of how the research questions (**RQ**) align with the survey questions (**SQ**). The survey questions and their corresponding research questions can be found in Table 15:

Table 14: Aligning the Research Questions (RS) with the Questions in the Survey (SQ)

	RQ1	RQ2	RQ3	RQ4	RQ5
SQ1	Directly address				
SQ2		Directly address			
SQ3			Directly address		
SQ4				Directly address	
SQ5					Directly address
SQ6				Indirectly address	
SQ7	Indirectly address	Indirectly address	Indirectly address	Indirectly address	Indirectly address

Each survey question consists of separate parts that cover all the aspects of the research questions, to ensure that all details can be validated. Survey questions 6 and 7 are not related to any particular research question; they focus on the opinion of the interviewees about the general objective, applicability and relevance of the research.

Table 15 shows the questions of the survey, and with which specific research questions they are aligned. By answering the research questions, an indication is given as to whether the research fulfils the research questions and the hypothesis.



Table 15: Aligning the research questions with the survey questions.

Survey Questions			Research Question	
			Directly align	Indirectly align
SQ1	1.1	To what extent do you agree that organisations need to re-examine widely accepted orthodoxies about strategy, business practice and market research when they want to target the BoP?	RQ1: Is the BoP a viable market?	
	1.2	To what extent do you agree that organisations have to deliver both value as well as low-costs to the BoP to be successful?		
	1.3	To what extent do you agree that an organisation that wants to target the BoP has to rethink and innovate their business model?		
	1.4	Do you think the BoP can be a feasible market to target if their core requirements are fulfilled?		
SQ2	2.1	To what extent do you agree that organisations make flawed assumptions about the BoP?	RQ2: Why are organisations struggling to penetrate the Bottom of the Pyramid (BoP) population successfully?	
	2.2	To what extent do you agree with the main reasons why organisations don't/can't successfully target the BoP population?		
	2.3	To what extent to you agree with the constraints that exist at the BoP?		
	2.4	To what extent to you agree with the core requirements (4As) that must be fulfilled in the BoP population?		
	2.5	To what extent to you agree that the BoP is a market that is not targeted efficiently?		
SQ3	3.1	To what extent to you agree that Sustainable Development is an essential part of targeting the BoP?	RQ3: Is Sustainable Development necessary when targeting the BoP?	
	3.2	To what an extent do you agree with the three Goals an organisation must pursue when targeting the BoP: Profit, Social equity (by making products/services equally available to all people) and ensuring the environment isn't harmed?		
SQ4	4.1	To what extent do you agree that the following building blocks of Osterwalder and Pigneur's business model fall under Utility: Customer, Value Proposition, Channels, and Customer Interface?	RQ4: What strategy must an organisation follow to successfully target the BoP a) What must the configuration of the business model and approach of an organisation be to target the BoP? b) What is the content of the Business Model Development Strategy?	
	4.2	To what extent do you agree that the following building blocks of Osterwalder and Pigneur's business model fall under Cost: Key Activities, Key Resources, Key Partnerships and Cost Structures?		
	4.3	To what extent do you agree with the structure of the Business Model Development Strategy?		
	4.4	Do you think that the BoP can be a possible blue ocean?		
	4.5	A business model that is designed to target the BoP must address Utility of the product/service first, and then the Price that the BoP can afford, and then they must innovate to reach their Target Cost to ensure they still make a profit. Do you agree with this statement? Any comments?		
	4.6	To what extent do you agree that the Innovation Sandbox Process will help summarise and put the BoP in context to be able to come up with solutions to fulfill the requirements of the BoP?		
	4.7	To what extent do you agree that an organisation will achieve greater success if they first immerse themselves in the BoP to gain insight into their needs and lifestyles, before designing the business model?		
	4.8	To what extent do you agree with the approach (Customer: Six Steps) the organisation must take to immerse themselves in the BoP?		
SQ5	5.1	To what extent do you agree that the core requirements (4A's), as well as utility, price and cost, are feasible tests to minimize risk of failure?	RQ5: How can the business model be designed to minimize the risk of failure?	
	5.2	To what extent do you agree that the Blue Ocean Strategy's strategic sequence combined with the Innovation Sandbox's core requirements are feasible prerequisites to evaluate the feasibility of each step in the Business Model Development Strategy?		
	5.3	To what extent do you agree that by testing each step/component of the Business Model Development Strategy for viability as it gets designed, the whole business model risk will be reduced?		
SQ6	6.1	To what extent do you agree that the Business Model Development Strategy can assist an organisation to fulfill the core requirements of the BoP and target them successfully?		All
	6.2	From your professional point of view, please comment on how applicable and relevant the Business Model Development Strategy is for organisations that want to target the BoP.		
SQ7	7	Further comments		All



Note: Question 5.2 was removed from the questionnaire to avoid repetition, because it was similar to question 5.1.

The interviewers were asked to rate the questions in the survey. They had to rate the questions as follows:

On a Scale of 1 to 5, with 5 being strongly agree and 1 being strongly disagree, please answer the following questions and **motivate your answer**:

5= Strongly Agree 1= Strongly Disagree

For a complete copy of the survey questions, see Appendix B

8.3 Feedback from the experts

The ratings that the interviewees gave each survey questions can be seen in Appendix C. The motivations that the interviewees gave for those ratings are displayed in Appendix D.

The results and feedback for the survey questions are used to validate the research questions of this thesis. The related answers and comments for each research question are given in the next section.

- 1) Is the **Bottom of the Pyramid (BoP)** a viable market?
- 2) What are the reasons why organisations struggle to expand into the BoP population successfully?
- 3) Is Sustainable Development necessary when targeting the BoP?
- 4) What strategy must an organisation follow to successfully target the BoP?
 - a. What must the arrangement of the business model and approach of an organisation be in order to target the BoP?
 - b. What is the content of the Business Model Development Strategy components?
- 5) How can the business model be designed to minimise the risk of failure?

8.3.1 Feedback and Comments

1) Is the Bottom of the Pyramid (BoP) a viable market?

The following points were made about the BoP as a viable target market.

- *“Disruptive change in attitude is required. Therefore nuanced adaption of working methods will not suffice.” ~EL*
- **GL** observes that many organisations that previously ignored the BoP are taking notice. *“It is true that many organisations that previously ignored this market are now paying attention.”* These organisations have seen the success of organisations like Capitec Bank and realised that the BoP has potential as a market.
- **GL** also noted that an organisation must rethink its business model to target the BoP, to such an extent that *“value, simplicity and accessibility are not already important focal points of the model.”* “This means that the business model needs to have inherent value, simplicity and accessibility as its focus.
- *“If no value or low cost exists, the BOP will move on to another supplier.”~VDSB.*



- “People buy ‘benefits’ and ‘value’ when they transact.”~**SdK**
- “Suitable cost is the relative ability to acquire a product. The value added has to be in line with that. Value added should be the main driver for buying behaviour.” ~**EL**
- “Value is an even more important driver than cost.” ~**GL**

Conclusion: All the interviewees agreed that the BoP is a viable market only if change occurs in the attitude and business models of organisation. All the interviewees commented on the importance of offering the BoP value. They also agreed that organisations need to offer the BoP value and low cost simultaneously. Yes, the BoP is a viable market.

2) What are the reasons why organisations struggle to penetrate the BoP population successfully?

The following feedback was given about why organisations struggle to penetrate the BoP:

- Two of the interviewees didn’t fully agree that organisations make assumptions about the BoP. **NdP** said that some organisations succeed in the BoP because they don’t make assumptions. **EL** said: “Assumptions are the second step. Problems will be more in the first step: recognising that the BoP could be a market.” **EL** is from the Netherlands where no BoP exists, hence it is difficult for him to assess the assumptions are made about the BoP. **VDSB** states: “We all live in our comfortable protected world and have no idea of BOP conditions. That will spill over to our thinking of ‘what is good for them’ and will be wrong.” **GL** also agrees that organisations make flawed assumptions about the BoP and says: “This has been a serious and compelling reason why this market is under-served.”
- **EL** added a reason why organisations don’t expand into the BoP. “For European companies: Loss of brand identity, brand image, and company image would also be important.”
- All interviewees agreed with the constraints that organisations face at the BoP.
- All interviewees agreed that the 4 A’s (core requirements) need to be fulfilled to target the BoP successfully.
- The 4 A’s are: Acceptability, Awareness, Availability and Affordability. **GL** added: “Very true. We use different words to capture our core focus, but the intent is the same.” Capitec’s core principles are: Simplicity, Personal Service, Accessibility and Affordability.
- **EL** liked the approach of fulfilling the 4 A’s, “because it’s not about detail and the completeness thereof, it’s more about ‘dimensions’.”
- All interviewees agree that the BoP market is not targeted efficiently. **VDSB** states: “I see little of it happen in practice, yet in townships (black not coloured) there is a buzz of entrepreneurship.”
- **EL** argued that organisations struggle to change their business model when targeting the BoP. “The Business Model is the translation between market and strategy. Therefore if market changes, the business model has to change.”



Conclusion: All the interviewees agreed with the main reasons why organisations struggle to target the BoP. Two interviewees didn't fully agree with the assumptions that organisations have. They all agreed with the constraints that organisations face at the BoP. And they also agree that the 4 A's are the core requirements of the BoP and must be fulfilled by an organisation to target the BoP successfully. Therefore, the main reasons why organisations struggle to target the BoP, stated in this thesis in Chapter 3.4, are assumed to be correct.

3) Is Sustainable Development necessary when targeting the BoP?

The following points were made about the importance of Sustainable Development when targeting the BoP:

- Both **NdP** and **SdK** agreed on the importance of the Triple Bottom Line (TBL).
- **GL** and **VDSB** didn't think that Sustainable Development is absolutely essential when targeting the BoP.
- **VDSB** thinks that Sustainable Development can be a "*Foggy politically correct statement*". Therefore, it was specifically defined for use in this thesis.
- Personally, **GL** agrees that Sustainable Development must be an essential part of targeting the BoP. "*However it must be noted that this issue [sustainable development] does not have much resonance with the BoP market. Good value in the short term is their primary focus.*"The BoP is more concerned with receiving good value than with saving the planet.
- All interviewees agreed with pursuing the three goals of profit, social equity and environmental quality.
- **EL** analysed the three pillars of Sustainable Development. He came up with the following conclusion. "*Profit: vouches for the sustainability of the company. Idealism won't work in the long run. Equity: if no attention to that, you will discriminate. Environment: If you do something, why not do it right. So actually sustainable = rational.*"He argues that an organisation must make a profit to be sustainable. If no equity exists in the organisation, discrimination can occur and organisations must design everything to ensure the environment is not harmed. He argues that the design must be rational instead of sustainable.
- **GL** thinks that the three goals must be pursued to ensure long-term success.

Conclusion: Sustainable Development is not essential when targeting the BoP. The BoP population's main desire is to receive good value. They are not very focused on the environment and sustainable development. Therefore, organisations must take responsibility to uphold the principles of sustainable development by designing the 4 P's – Products, Processes, Practices and Premises – to be as sustainable as possible. The interviewees agreed that the principles of Sustainable Development are essential for an organisation that wants to achieve long-term success.



4) What strategy must an organisation follow to successfully target the BoP?

a. What must be the configuration of the business model and approach of an organisation to target the BoP successfully?

The following feedback was given about the configuration of the BoP:

- **SdK** agrees with the configuration of the BMDS, and says that the BMDS links with the value chain analysis, the Balanced Scorecard and a cost-benefit analysis (the cost and value side).
- **GL** thinks the BMDS is a *“useful framework.”*
- **EL** made a suggestion that the Value Proposition, the Channels and the Customer Interface be added under the heading ‘Window of Opportunity’, because, according to him, all three these components of the BMDS open up an opportunity for an organisation. He also thinks that the Window of Opportunity should *“have an implicit feed-forward to pricing”*. This means that organisations must be aware of the price-range that the BoP can afford before they start to design the components in the Window of Opportunity. This will provide initial testing for feasibility. It was included in Chapter 6.3.2.
- **EL** suggested that the term ‘Desired Profit’ be replaced with ‘Required profit’, which is the minimum profit an organisation must make for the business model to be feasible.
- **VDSB** noted that the implementation of the BMDS can *“be a huge challenge”*.
- All the experts, except **SdK** and **GL**, completely agreed that if the BoP consists of non-consumers, they could be a blue ocean. **SdK** noted that the BoP is not a blue ocean, but a blue ocean can be created in the BoP.
- **GL** thinks that whether the BoP is a possible blue ocean or not *“depends on the industry. 5 years ago this would have been true for financial service. Now this is becoming a more important part of many companies’ business strategies.”* When Capitec first targeted the BoP, few other organisations were aware that the BoP is a viable market. Now, many organisations are trying to target the BoP.
- **SdK** and **GL** agree to the sequence of Utility, Price and Cost. **SdK** states: *“There must also be some ‘emotional transaction’ and ‘emotional benefits’ for the member in the BoP, otherwise they will not buy. Utility must be the driving force and trigger to purchase (See Maslow).”* **GL** says that it is *“very important to understand that a cost-plus model will probably fail.”*

Conclusion: All interviewees agree with the configuration of the BMDS. They agree with the sequence that the business model components are assembled. The BoP can be a possible blue ocean, depending on the industry.



b. What is the content of the Business Model Development Strategy?

The following comments were made about the contents of the BMDS.

- All interviewees agreed that the Innovation Sandbox Process could be very useful. **SdK** stated, *"It gives a method and process to follow"*. **VDSB** thinks that *"Any metaphor is hugely helpful"*. **GL** thinks that the Innovation Sandbox is *"a useful approach to clarify ideas."* However, **EL** warns: *"If Sandbox is a tool in the model, it's great. If it were to become a fixed, inherent part thereof, you'll limit yourself too much"*. Therefore, the Innovation Sandbox Process is used as a tool and is not inherent in the framework.
- The interviewees all agreed that the design of the BMDS must start with the customer. **EL** states: *"User centred design is paramount everywhere"*.
- According to **EL**, *"Primary research following secondary research has the risk of arrogance."* He warns that primary research should not be about validating the secondary research just for the sake of proving the secondary research accurate. The organisation should keep an open mind and figure out whether the research and the assumptions that were made in the secondary research are correct.
- **GL** agrees that the approach to understand the BoP (Chapter 7.2) is *"very necessary."* He thinks the approach is *"likely to be iterative rather than linear."* **GL** warns that *"any assumptions must be stated and explicitly tested."*

Conclusion: The interviewees all agreed with the contents of the BMDS, and that the Innovation Sandbox Process is a useful tool to clarify the context of the BoP.

5) How can the business model be designed to minimise the risk of failure?

The following comments were made about testing the BMDS.

- All interviewees agree that using the 4 A's and utility, price and cost to test the feasibility of the components of the BMDS can minimise the risk of failure of the business model. **GL** agrees, *"to the extent that to not consider them will probably lead to failure."* **NdP** warned that *"Sum of Parts<> Sum of whole"*. **EL** said: *"Implicitly Yes. Explicit proof of complete testing is impossible."* **EL** goes on to say that *"Testing the parts (independently) is not enough to test the whole, but it is required to be able to test the whole."*

Conclusion: Testing the parts of the BMDS before implementing the business model cannot completely reduce the risks. It can help minimise the risks. It is important to note that testing only the components is not sufficient is not enough to test the whole. The whole BMDS must also be tested in its entirety. Testing the components is necessary to test the whole.



8.3.2 General opinions and comments

The following two questions were added to the questionnaire to find out:

A) to what extent the experts agree with the BMDS, and

B) how applicable and relevant the BMDS is.

These two questions were added to the survey to allow the interviewees to express their opinions on the BMDS and the research done. These questions are significant because they give general feedback on the work done, which can be used to improve the BMDS and find any research gaps or logical errors.

A) To what extent do you agree that the Business Model Development Strategy can assist an organisation to fulfil the core requirements of the BoP and target them successfully?

EL: *"The Model is: Structured, transparent, dependency orientated, allows flexibility in use, is not necessarily deterministic. It is clear, understandable, inherently shows reproducibility. Gives sum of parts, where parts are clear => YES."*

GL: *"Certainly this is a very useful framework that applies a structured approach to the consideration of all of the most important issues."*

SdK: *"This is at least 100% better than nothing. Currently there is no alternative so this strategy model and process will contribute and assist organisations. It is a benchmark."*

NdP: *"Forms a good structure from [where] to start: a) Comprehensiveness, b) Aggregate [Triple Bottom Line can be reached], c) Also provides a base platform for further engagement."*

VDSB: *"Fully"*

B) From your professional point of view, please comment on how applicable and relevant the Business Model Development Strategy is for organisations that want to target the BoP.

EL: *"It's applicable for any Sub-section of the overall market structure. With the right input it can be more tailored to a specific sub-section, for example the BoP. I think the model is a great contribution to many existing design models."*

GL: *"This model is very relevant, and is definitely applicable to Capitec's business. It covers all major areas of concern that we addressed in developing our business model, and structures them in a thoughtful way."*

SdK: *"Very practical and relevant as I can follow the process and building blocks (recipe) to use in any organisation that wants to penetrate the BoP."*

NdP: *"Good starting point. To be refined in a specific application/industry/region/culture/value chain."*

VDSB: *"Yes"*

Further comments

EL: *"Impressive work!"*

GL: *"The document is one that shows both the essentials of defining a business model, as well as the importance and relevance of the previously ignored market."*



SdK: *“This is a very Scientific Study and of very high standard!! It follows a very unique thinking and design principles that is also practical and implement in the real world. A very fine balance between theory, process and application as well as a method one can use in practice. This study will and can be the foundation/ basis for future development work and further studies. Congratulations!!! “*

NdP: *“Proof of pudding is in the eating.”*

VDSB: *“This is great stuff Tanye and screams for wider application and awareness.”*

8.3.3 Recommendations

- **GL** and **EL** both recommended that the organisation rather expand into the BoP instead of just targeting that part of the pyramid. They must target the whole pyramid to increase their market share, by figuring out what the commonalities are in the needs and requirements of the whole pyramid.
- The Customer component: **EL**'s warning not to try and validate the secondary research in the primary research was added to the customer component in the six steps (Chapter 7.2). **GL** stated that assumptions that were made about the BoP must be stated before starting with the research, and then explicitly tested. This was also added to Chapter **X**.
- The 'Window of Opportunity' that **EL** suggested was added to the BMDS (Chapter 6.3)
- 'Desired Profit' was changed to 'Required Profit' as recommended by **EL**.
- The Sandbox Innovation Process is used as an approach to describe the BMDS components and is not inherent in the BMDS. It is a tool that can assist organisations in understanding the BoP and describing the components of the BMDS. ~**EL**
- 'Loss of brand identity' was added to one of the reasons organisations struggle to target the BoP in Chapter 3.4 (**EL**). Some organisations might think that targeting the BoP would make their upper-class customers unhappy.

8.3.4 Future Work

Possible future work, which resulted from the expert analysis:

- The following statement by **EL** can be investigated: *“From an abstract viewpoint: The model can target any section of the pyramid, and can therefore target the BoP”*. Can the BMDS be used to target any part of the economic pyramid?
- **NdP** said that the *“proof of the pudding is in the eating.”* Implementing the BMDS can also be undertaken in the future.

The future work will be discussed in more detail in the Conclusion (Chapter 9).



8.5 Validation Conclusion

The lessons that were learned from the Capitec case study are incorporated in the BMDS. The most important lessons were about the BoP as a customer. The customer must be treated with immense respect at all times; they need to feel welcome and valued, no matter where they are situated in the economic pyramid. Understanding the BoP customer is also extremely important to ensure that products and services are tailored to their needs.

The recommendations, opinions and motivations of the experts were taken into account and the variations in opinions were analysed and incorporated into the framework. Differences in opinion mostly occurred where the experts had different views and a differing understanding of the different fields.

All interviewees agreed that the model was useful. They all agreed that no other framework to design a business model for the BoP existed. Two authors noted that it is a starting point from which the framework can be refined for any industry and market, and two others noted that it establishes a foundation for future work and studies on business model design. One author noted that it is a new framework that can complement existing design models. One author called it a benchmark. One author stated that

“The Model is: Structured, transparent, Dependency orientated, Allows flexibility in use, is not necessarily deterministic. It is clear, understandable, inherently shows reproducibility. Gives sum of parts, where parts are clear”.

Another author who was part of designing Capitec's business model noted:

“This model is very relevant, and is definitely applicable to Capitec's business. It covers all major areas of concern that we addressed in developing our business model, and structures them in a thoughtful way.”

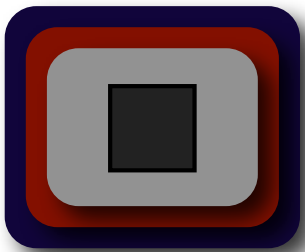
The interviewees agree that the BMDS will help deal with overcoming the main reasons why organisations struggle to target the BoP, namely:

- Assumptions
- Understanding
- Approach
- Design
- Brand image loss

It can be stated with conviction that the BMDS will be successful, provided it is correctly designed and implemented.



Conclusion



“A customer is the most important visitor on our premises, he is not dependent on us. We are dependent on him. He is not an interruption in our work. He is the purpose of it. He is not an outsider in our business. He is part of it. We are not doing him a favor by serving him. He is doing us a favor by giving us an opportunity to do so.” (Mahatma Gandhi)



9 Conclusion and Recommendations

The purpose of this final chapter is to address the following:

Research summary: Analysing the research method that was used and how it corresponds with the chapters in this document.

Conclusions: Concluding the research and its findings.

Future work: A discussion of potential future research.

Concluding remarks: Final concluding remarks

9.1 Conclusions

9.1.1 Research Summary

Currently, the BoP is likely to pay more for products, food and loans than the middle and upper class. The reason for this is that they are under-served by markets and organisations, because the infrastructure to serve them is not in place and most organisations consider the challenges of the BoP overwhelming and unconquerable. As a consequence, the BoP doesn't have easy access to products and services, many of which these organisations could provide, and which the BoP needs to live a decent, sustainable life.

Organisations face constant pressure to increase their market share and profits and improve their performance in today's aggressive corporate environment. To retain their competitiveness, they have to look at unconventional and alternative markets.

By recognising the BoP as a potential emerging market, organisations can increase their market share or enter new markets, thereby creating benefits for organisations as well as the BoP.

The BoP customer base can present one of the biggest opportunities ever for an innovative organisation, because the constraints in that segment forces alternative and eccentric solutions. When an organisation actively targets the BoP, both parties will be benefited, and the BoP will experience rising and sustainable levels of prosperity, and improvements in their quality of life, because more products and services are available at more affordable prices. Also, the BoP will become empowered, because, for the first time, they will learn to make choices about which products on offer to use.

Organisations will benefit from new and increased market share, larger volumes, and economies of scale, which will sustain their competitive advantage and lead to higher revenues. Accessing the BoP can open up growth opportunities for organisations. With increasing competition, innovations and technological advances, organisations must keep all their growth options open.

An organisation that wishes to enter the BoP market can use the **Business Model Development Strategy**, which was assembled in Chapter 6 and is shown again in Figure 60, to thoroughly understand where it is currently situated, gain insight into the lifestyle, constraints and core requirements of the BoP, and then systematically develop and design a business model and strategy to target the BoP successfully.

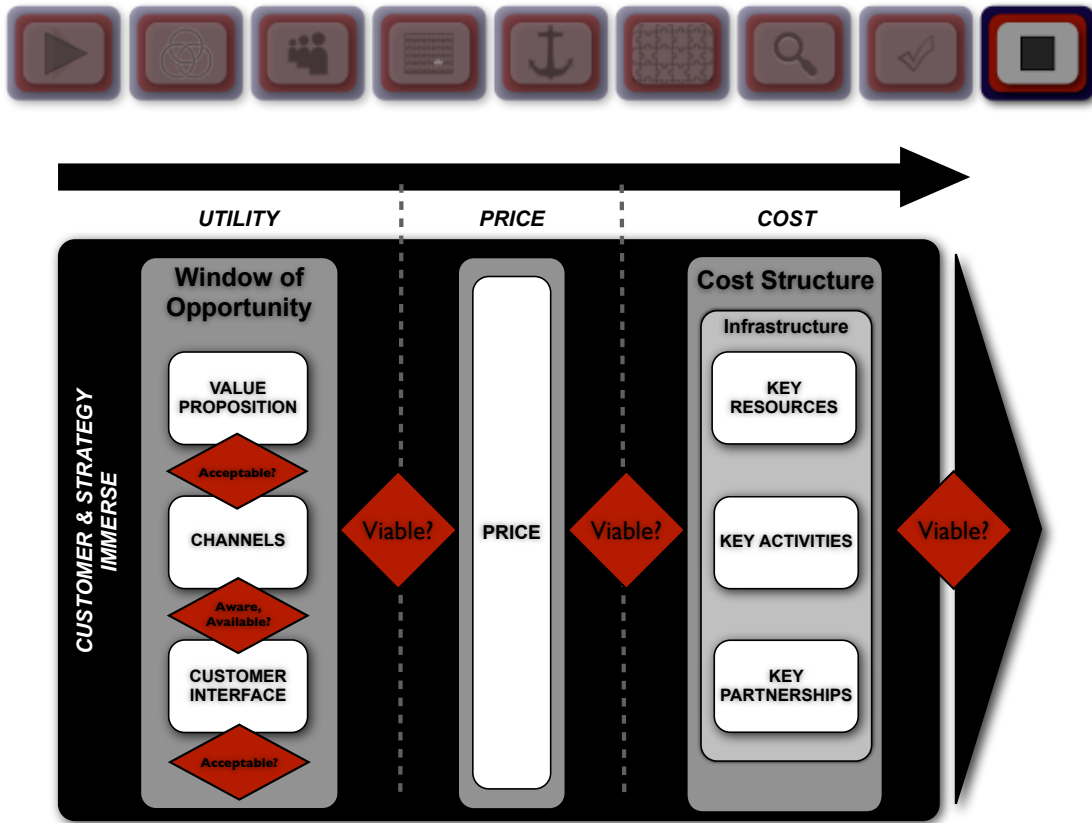


Figure 60: The Business Model Development Strategy

The purpose of this research was to overcome the constraints that organisations face when they want to target the BoP population successfully.



Table 16 shows how the different chapters in this thesis contribute to the research method that was stated in Chapter 1.2, and it will be presented here:

Table 16: The research methodology completed

	1. Introduction	2. Sustainable Development	3. Bottom of the Pyramid population	4. Business Models	5. Blue Ocean Strategy	6. The Business Model Development Strategy	7. The Components of the Business Model Development Strategy	8. Validation	9. Conclusion
1. Identify Opportunity		✓	✓						
2. General Purpose	✓								
3. Background and Literature Study		✓	✓	✓	✓				
4. Develop a Framework		✓	✓	✓	✓	✓			
5. Explain the Framework							✓		
6. Validate the Framework								✓	
7. Research Conclusion									✓

The sequence according to which this document is structured and the sequence in which the research happened are not identical.

- **Identify Opportunity**
Opportunity was identified while doing research on Sustainable Development (Chapter 2) and the BoP population (Chapter 3).
- **General Purpose of the Research**
Chapter 1 gives an overview of the main aims of this research.
- **Background and Literature Study**
The background and the literature that were examined and employed in this thesis are discussed in Chapters 2-5.



- **Develop a Framework**
The configuration of the Business Model Development Strategy consists of a combination of Sustainable Development Principles (Chapter 2), BoP literature (Chapter 3), Business Model literature (Chapter 4) and Blue Ocean Strategy (Chapter 5). The assembly of the BMDS and the approach that an organisation must follow to target the BoP successfully are explained in Chapter 6.
- **Explain the Framework**
The content of each of the BMDS components is discussed and explained in Chapter 7. The Innovation Sandbox Process (Chapter 6) is used to organise the components for this document and give an approach to discuss them. The Capitec Bank case study is also included in Chapter 7, where it is discussed in the context of each BMDS component.
- **Validate the Framework**
The research is validated in Chapter 8. The Capitec case study, as well as an 'Expert Analysis' is used to validate this thesis.
- **Research Conclusion**
The research is concluded in Chapter 9.

9.1.2 Research Conclusion within the context of the Research Questions

The primary objective of this research was to design a framework that would guide an organisation through the process of designing a business model that allows them to expand into the BoP.

The secondary objective was to ensure that the organisation adheres to the three main goals of sustainable development when targeting the BoP, which follow below.

- The fair treatment of all people: Giving all people, no matter at which level of the economic pyramid they are situated, equal access to products and services. This is the basis of social equity. Engaging the BoP in economic activity by fulfilling the requirements of the BoP.
- A refusal to degrade the environment
- Economic growth and development to ensure the organisation makes a profit

These two objectives led to the author asking different questions, which resulted in the research questions in Chapter 1.2. These questions were validated using expert analysis in Chapter 8. To reach a conclusion in this thesis on whether the research questions and hypothesis have been sufficiently addressed, the conclusion of each research question must first be reviewed.

1) Is the BoP a viable market?

Conclusion: The BoP can be a viable market if organisations adjust their attitudes and design a business model specifically aligned with the needs of the BoP. (Chapter 3)



2) What are the reasons why organisations struggle to expand into the BoP population successfully?

Conclusion: Organisations struggle to target the BoP successfully for various reasons. These include (Chapter 3.2):

- Organisations make assumptions about the BoP which make the BoP seem like an unattractive market (Chapter 3.2);
- Organisations don't understand the needs of the BoP;
- Organisations don't approach the BoP in an appropriate way. They don't know where to start targeting the BoP.
- Organisations are not sure how to design their business models for the BoP.

Expert analysis revealed another reason: organisations might be reluctant to target the BoP, because they might worry about loss of brand identity. The constraints that the BoP faces were also discussed in Chapter 3.2; tools and methods to overcome these constraints were considered.

3) Is Sustainable Development necessary when targeting the BoP?

Conclusion: The three pillars of sustainable development (Chapter 2) are aligned with the three main goals of the secondary objective of this thesis, the problem and the hypothesis that was stated in Chapter 1.2.2. From this research, it was found that sustainable development is not absolutely necessary, but should be a prerequisite for any organisation that wants to target the BoP as a set of values and goals to achieve. The organisation must be responsible for upholding the principles of sustainable development.

4) What strategy must an organisation follow to target the BoP successfully?

a. What must be the configuration of the business model and approach of an organisation in order to target the BoP successfully?

Conclusion: The configuration of the business model and the approach an organisation must use to target the BoP are given in the Business Model Development Strategy. This configuration consists of nine components, organised in a specific fashion that was established in this research. The development and assembly of the BMDS is given in Chapter 6. This approach is generic and must be personalised by each organisation.

b. What is the content of the Business Model Development Strategy components?

Conclusion: The content of each of the BMDS components must be developed by the organisation. The Innovation Sandbox Process (Chapter 6.6) can assist an organisation to clarify the context of the BoP. Each component must include the constraints for that component, and the BoP's core requirements that need to be fulfilled. The organisation must customise the components to correspond to their need, industry and market.



5) How can the business model be designed to minimise the risk of failure?

Conclusion: The business model will be tested at various stages of its development. The parts of the BMDS will be tested, as well as the whole, to ensure that risk of failure is minimised. The tests that will be used will ask whether the organisation fulfils the 4 A's (Chapter 3.3.1) – Acceptability, Awareness, Availability and Affordability – and also the test of the strategic sequence given in the blue ocean strategy (Chapter 5.2.4): does the organisation offer the BoP exceptional utility at a price it can afford, while the organisation still makes its required profit by reaching a low target cost?

For more detail on how the research questions were validated, see Chapter 8.

All the research questions have been answered favourably and the BMDS has been justified in the validation chapter (Chapter 7). Therefore, a conclusion can be drawn that the hypothesis can be confirmed as true:

An organisation can target the Bottom of the Pyramid population successfully while simultaneously pursuing sustainable development, if they follow a strategy that formulates an approach to design a business model. Strategy

9.1.3 Concluding Remarks

This research effort offers a systematic approach to design a business model to successfully target and expand into the BoP. The BMDS was validated using a case study of Capitec Bank, and an expert analysis further strengthened the validation of the framework.

The importance of really understanding the needs of the customer became apparent in this research. Another important lesson was that the BMDS is only a generic model and must be used as a guideline. It needs to be adjusted to each specific organisation, depending on the industry and market. The BMDS is therefore presented in a very generic fashion to ensure that its application is not limited. In the generic form, it can also be used as a basis for future research.



9.2 Recommendations for Future Work

During the process of conducting this research, a number of subjects were identified that has potential for further study and can result in future work. These recommendations are:

- **Increasing Purchasing Power**
This recommendation is based on Figure 2. This thesis focuses on making more products and services that are Acceptable, Available and Affordable to the BoP. The manufacturing of more products and the availability of services alone cannot reduce poverty. It can improve the standard of living for the BoP; empower them by giving them a choice and decrease relative poverty. But it does not increase spending power and make them less poor. It will not increase the amount of money they have to spend. The only way to increase the money they have available is by giving them more spending power. Spending power can be improved by job creation and giving the BoP access to credit. This presents an opportunity for future work. The study can focus on job creation through entrepreneurship and skills development initiatives. It can also look at ways to make credit more accessible to the BoP. The Business Model Development Strategy, combined with increasing spending power can help many people get out of the poverty trap.
- **Implementation of Business Model Development Strategy**
The scope of this thesis did not allow a full testing of the Business Model Development Strategy, therefore the true validity of the framework will only be established once the framework is practically implemented. Future work can focus on the implementation of the framework in the real world.
- **Testing this BMDS at other levels of the pyramid**
One of the interviewers suggested that the Business Model Development Strategy be used at any level of the economic pyramid. Future work can focus on how the BMDS must be changed and adapted to make it feasible for other levels of the economic pyramid.
- **Adjusting the BMDS for different industries and markets**
Future work can look at how the BMDS must be refined for different industries. It can focus on customising the BMDS for a specific industry.
- **Using sustainable design to decrease cost**
Future research can seek to determine whether and how an organisation can reduce costs when it applies the principles of sustainable design to the 4 P's – Products, Processes, Practices, and Premises.

References

10 References

- (1) Prahalad C. The fortune at the bottom of the pyramid. Upper Saddle River, N.Y.: Wharton School Publishing; 2006.
- (2) Centre for Science and Environment. Our Ecological Footprint. Gobar Times. 2000 31 May;13.
- (3) Daly HE. Operational principles for Sustainable Development. *Ecol.Econ.* 1990;2(1):1-6.
- (4) Hart S, Prahalad CK. The fortune at the bottom of the pyramid. *Strategy+Business.* 2002;26:54-67.
- (5) Brundtland GH. Report of the World Commission on Environment and Development: Our common future. 1987:8-9.
- (6) Sachs JD, Reid WV. Investments toward sustainable development. *Science.* 2006;312(5776):1002.
- (7) Hasna AM. Dimensions of sustainability. *Journal of Engineering for Sustainable Development: Energy, Environment, and Health.* 2007;2(1):47-57.
- (8) Elkington J. Cannibals with forks: The triple bottom line of twenty first century business. Oxford: Capstone Publishing Ltd; 1997.
- (9) Ecotrust. Reliable Prosperity: Social equity. 2010 [Accessed 20 August 2010]. Available at: http://www.reliableprosperity.net/social_equity.html.
- (10) Schumacher EF. Small is beautiful. Lisbon: Publicações D.Quixote 1985.
- (11) Osterwalder A, Pigneur Y. Business model generation. Self-published; 2009.
- (12) Anastas PT, Zimmerman JB. Peer reviewed: Design through the 12 principles of green engineering. *Environ. Sci. Technol.* 2003;37(5):94-101.
- (13) McLennan JF. The philosophy of sustainable design: the future of architecture. Kansas City , MO: Ecotone Publishing; 2004.
- (14) Christensen CM, Raynor ME, Leffert J. The Innovator's Solution. Cambridge, MA: Harvard Business School Press; 2003.
- (15) Narayan D, Patel R, Schafft K, Rademacher A, Koch-Schulte S. Voices of the poor: Can anyone hear us? World Bank; 2000.
- (16) Studies in Poverty and Inequality Institute. The measurement of poverty in South Africa project: Key issues. 2007.
- (17) Oosthuizen M. Estimating poverty lines for South Africa. Development Policy Research, UCT: Cape Town; 2008.
- (18) Sachs JD, Mueller RAE. The end of poverty. London: Penguin Books; 2005.
- (19) Galbraith JK. The affluent society. New York: Mariner Books; 1958.

References

- (20) Sen A. Commodities and capabilities. Amsterdam: New Holland; 1985.
- (21) World Bank. Voices of the poor. World Bank; 2007.
- (22) Vasquez I. Ending mass poverty. Economic perspectives: U.S. Department of State; 2001 September.
- (23) Crilly K. U.N. aid debate: Give cash, not food? The Christian Science Monitor. 2008 June 4; [9 February 2010].
- (24) Anderson J, Billou N. Serving the world's poor: Innovation at the base of the economic pyramid. J. Bus. Strategy. 2007;28(2):14-21.
- (25) Prahalad CK. The innovation sandbox. Strategy+Business. 2006;44:62.
- (26) Dabholkar V. Going beyond idea contest #3: Building innovation sandboxes. 2008 [Accessed 24 February 2010]. Available at: <http://cataligninnovation.blogspot.com/2009/05/dynamic-innovation-sandbox-where.html>.
- (27) Rappa MA. The utility business model and the future of computing services. IBM Syst J. 2004;43(1):32-42.
- (28) Christensen CM. The innovator's dilemma: when new technologies cause great firms to fail. Boston, MA: Harvard Business School Press; 1997.
- (29) Citibank. Building a business model for success. Citigroup, Inc.; 2006.
- (30) Magretta J. Why business models matter. Harv. Bus. Rev. 2002;80(5):86-93.
- (31) Linder JC, Cantrell S. Changing business models: surveying the landscape. Accenture Institute for Strategic Change. 2000:1-13.
- (32) Chesbrough H, Rosenbloom RS. The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. Industrial and Corporate Change. 2002;11(3):529-555.
- (33) Osterwalder A. The business model ontology - A proposition in a design science approach. Lausanne: University of Lausanne; 2004.
- (34) Hagel J, 3rd, Singer M. Unbundling the corporation. Harv. Bus. Rev. 1999 Mar-Apr;77(2):133-41, 188.
- (35) Hager C. Determining degree of innovation in business models by applying product innovation theory. Oslo: University of Oslo; 2006.
- (36) Kotelnikov V. Radical innovation versus incremental innovation. 2010 [Accessed 30 March 2010]. Available at: http://www.1000ventures.com/business_guide/innovation_radical_vs_incr.html.
- (37) Stähler P. Geschäftsmodelle in der digitalen ökonomie. Merkmale, Strategien und Auswirkungen. Amazon. de; 2002.
- (38) Weill P, Vitale MR. Place to space: Migrating to eBusiness Models. Harvard Business Press; 2001.

References

- (39) Developing business models for eBusiness. International Conference on Electronic Commerce; 2001.
- (40) Gordijn J, Akkermans JM. Value-based requirements engineering: Exploring innovative e-commerce ideas. *Requirements Engineering* 2003;8(2):114-134.
- (41) Afuah A, Tucci CL. *Internet business models and strategies*. Boston: McGraw-Hill; 2003.
- (42) Tapscott D, Lowy A, Ticoll D. *Digital capital: Harnessing the power of business webs*. Boston: Harvard Business Press; 2000.
- (43) Hamel G, Trudel JD. *Leading the revolution*. Boston: Harvard Business School Press; 2000.
- (44) Mahadevan B. Business models for Internet-based e-commerce: An anatomy. *Calif.Manage.Rev.* 2000;42(4):55-69.
- (45) Amit R, Zott C. Value creation in E-business. *Strategic Manage.J.* 2001;22(6-7):493-520.
- (46) Applegate LM. *E-business Models: Making sense of the Internet business landscape. Information technology and the future enterprise: New models for managers*. 2001.
- (47) First BITA Case Study Experiences with Regard to Complex Value Systems. BITA-B4U Symposium Business Models for Innovative Mobile Services, Delft, The Netherlands; 2002.
- (48) Kaplan RS, David P. The balanced scorecard—Measures that drive performance. *Harv. Bus. Rev.* 1992;71-79.
- (49) Kim WC, Mauborgne R. *Blue ocean strategy*. Boston, MA: Harv. Bus. Rev; 2005.
- (50) Kim WC, Mauborgne R. Value innovation. *Harv.Bus.Rev.* 2004;82(7/8):172-180.
- (51) Porter ME. From competitive advantage to corporate strategy. *Harv. Bus. Rev.* 1987;65(3):43-59.
- (52) Kim WC, Mauborgne R. Strategy, value innovation, and the knowledge economy. *Sloan Manage.Rev.* 1999;40:41-54.
- (53) Kim WC, Mauborgne R. Charting your company's future. *Harv. Bus. Rev.* 2002;80(6):76-85.
- (54) Kim WC, Mauborgne R. Creating new market space. *Harv. Bus. Rev.* 1999;77(1):83-93.
- (55) Christensen CM, Anthony SD, Roth EA. *Seeing what's next: using the theories of innovation to predict industry change*. : Harvard Business School Press; 2004.
- (56) Anthony S. Nintendo Wii's Growing Market of "Nonconsumers". 2008; Available at: http://blogs.hbr.org/anthony/2008/04/nintendo_wiis_growing_market_o.html.
- (57) Kim WC, Mauborgne R. Knowing a winning business idea when you see one. *J. Prod. Innovat. Manag.* 2001;18(2):123.
- (58) Lamprecht S. Interviewed by Tanye ver Loren van Themaat. 2009.

References

- (59) Capitec Bank. Capitec website. 2010 [Accessed 9 July 2010]; Available at: <http://www.capitecbank.co.za/>.
- (60) Peacock B. Finding a needle in a haystack. 2010; Available at: <http://www.timeslive.co.za/business/money/article745940.ece/Finding-the-needle-in-the-haystack>.
- (61) Capitec. Credit suisse: Great brands of tomorrow. 2010 [Accessed November 16, 2010]; Available at: <http://www.capitecbank.co.za/investor-relations/news/investor-release/6/credit-suisse-great-brands-of-tomorrow>.
- (62) Narayan D, Chambers R, Shah MK, Petesch P. Voices of the poor: Crying out for change. New York 2000.
- (63) Planting S. Assume you can. 2006 [Accessed February 17, 2010]; Available at: <http://free.financialmail.co.za/innovations/06/0407/cinn.htm>.
- (64) McNulty A. Behind Capitec's successful model. 2009 [Accessed November 16, 2010]; Available at: <http://www.leader.co.za/article.aspx?s=1&f=1&a=1650>.
- (65) Lee G. from Capitec Bank. Interviewed by Tanye ver Loren van Themaat. 2009-2010.
- (66) Synovate. Rich insights into low income consumers. 2006 [Accessed March 29, 2010]; Available at: <http://www.synovate.com/insights/infact/issues/200611/>.
- (67) Maslow AH. A theory of human motivation. Psychol.Rev. 1943;50(4):370-396.
- (68) Pfeiffer P, Massen S, Bombka U. Serving the low-income consumer: How to tackle this mostly ignored market. AT Kearny Executive Agenda. 2010:29 March 2010.
- (69) Bettencourt LA, Ulwick AW. The customer-centered innovation map. Harv.Bus.Rev. 2008;86(5):109.
- (70) Caruthers RW. Capitec banks on South Africa's underserved. 2006 [Accessed February 17, 2010]; Available at: <http://www.windowfs.com/special-features/capitec-banks-on-south-africa's-underserved>.
- (71) Pinkovitz B. Using lifestyle to analyze market potential. CCED. February 1997.

Appendix A: Evaluation Document – Report

A Business Model Development Strategy

Targeting the Bottom of the Pyramid Population

Evaluation Document – Part 1

October 2010

Tanye ver Loren van Themaat

082 450 8472

tanye@sun.ac.za

Appendix A

1. Introduction

C.K. Prahalad has defined individuals living below \$1500 per year as the **Bottom of the Pyramid (BoP)** population (1). \$1500 per year is considered the minimum amount necessary to sustain a decent life. More than two-thirds of the world's population falls in this category.

Historically the BoP has been ignored by large organisations, and isn't considered a viable market because of the low profit margins and many constraints that they show. But organisations must take into account that for the first time billion aspiring poor are joining the economic activity (2) and they can offer great opportunities to organisations willing to jump into the deep end. Organisations that target the high-end market often follow a conventional strategic logic and orthodoxies¹. Michael Porter stated that every organisation must decide whether their strategy will focus on differentiation, cost leadership or on getting an advantage over the competition (3). It was always believed that organisations had two choices: Either they create average value at low costs for their customers, or greater value at higher costs. Value innovation is the cornerstone of **Blue Ocean Strategy** (4), and it rejects the fundamental principle that a trade-off must exist between low-cost and value, both essentials the BoP desperately needs.

Successfully targeting the BoP market will require unconventional thinking, breaking boundaries, problem solving, innovation and a lot of creativity.

The biggest challenge that organisations who consider targeting the BoP face is *"selling to the poor and helping them improve their lives by producing and distributing products and services in **culturally sensitive, environmentally sustainable, and economically profitable** ways"* (2). This notion is known as Sustainable Development², and must be kept in mind when approaching the BoP.

Hasna (5) describes **Sustainable Development** as the resolution of the conflicts that arise between various competing and even contradicting goals when organisations pursue social equity³ (cultural sensitivity and fairness), environmental quality and economic development (profit) at the same time.

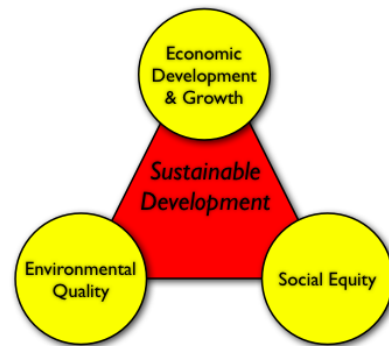


Figure 1: The three pillars of Sustainable Development

¹ Orthodoxy: authorized or generally accepted theory, doctrine, or practice (New Oxford American Dictionary)

² Sustainable development is development that *"meets the needs of the present without compromising the ability of future generations to meet their own needs"* (17)

³ Social equity (18) *"implies fair access to livelihood, education, and resources; full participation in the political and cultural life of the community; and self-determination in meeting fundamental needs."*

Appendix A

Therefore the goals of an organisation that wants to enter the BoP must be to (1, 6):

- Make products and services available to the whole Economic Pyramid, hence promoting Social Equity by fair trade. **Including⁴** the BoP from economic activity by fulfilling the requirements of the BoP.
- Ensure that the environment is not harmed.
- Develop economically and make a profit.

My thesis will focus on organisations who want to capture new market share, by capturing the low-income population, the population at the Bottom of the Economic Pyramid. A framework called the **Business Model Development Strategy (BMDS)** will be developed to support an organisation in designing and testing a business model that targets this low-income population.

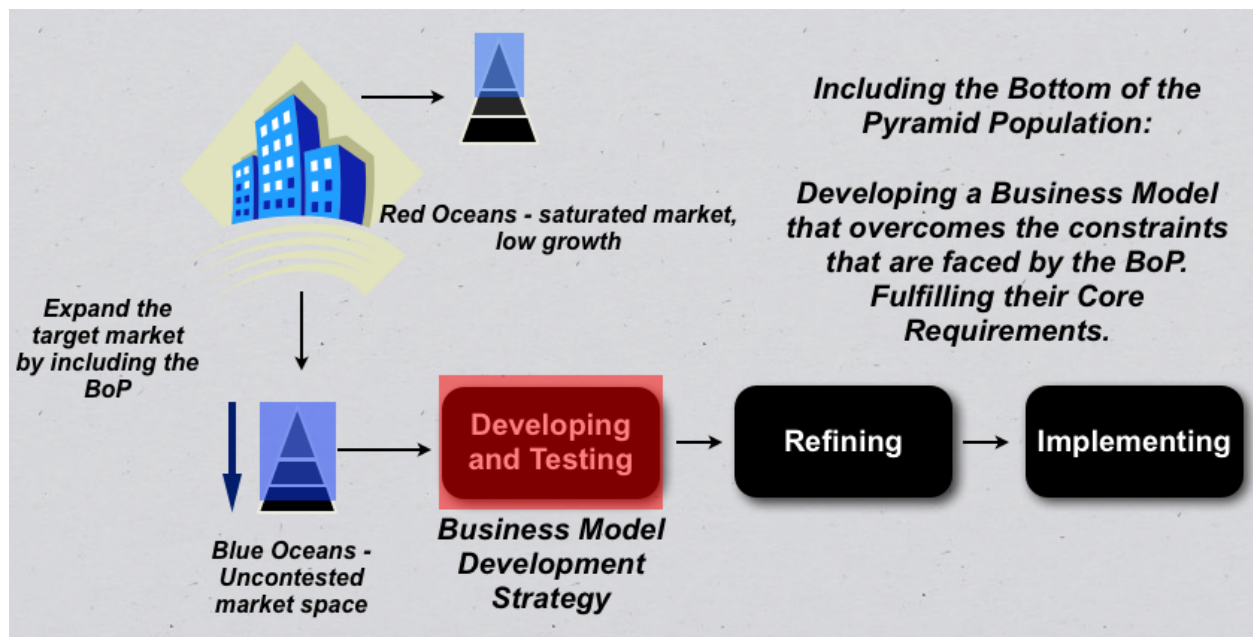


Figure 2: Where the Business Model Development Strategy fits into the big picture

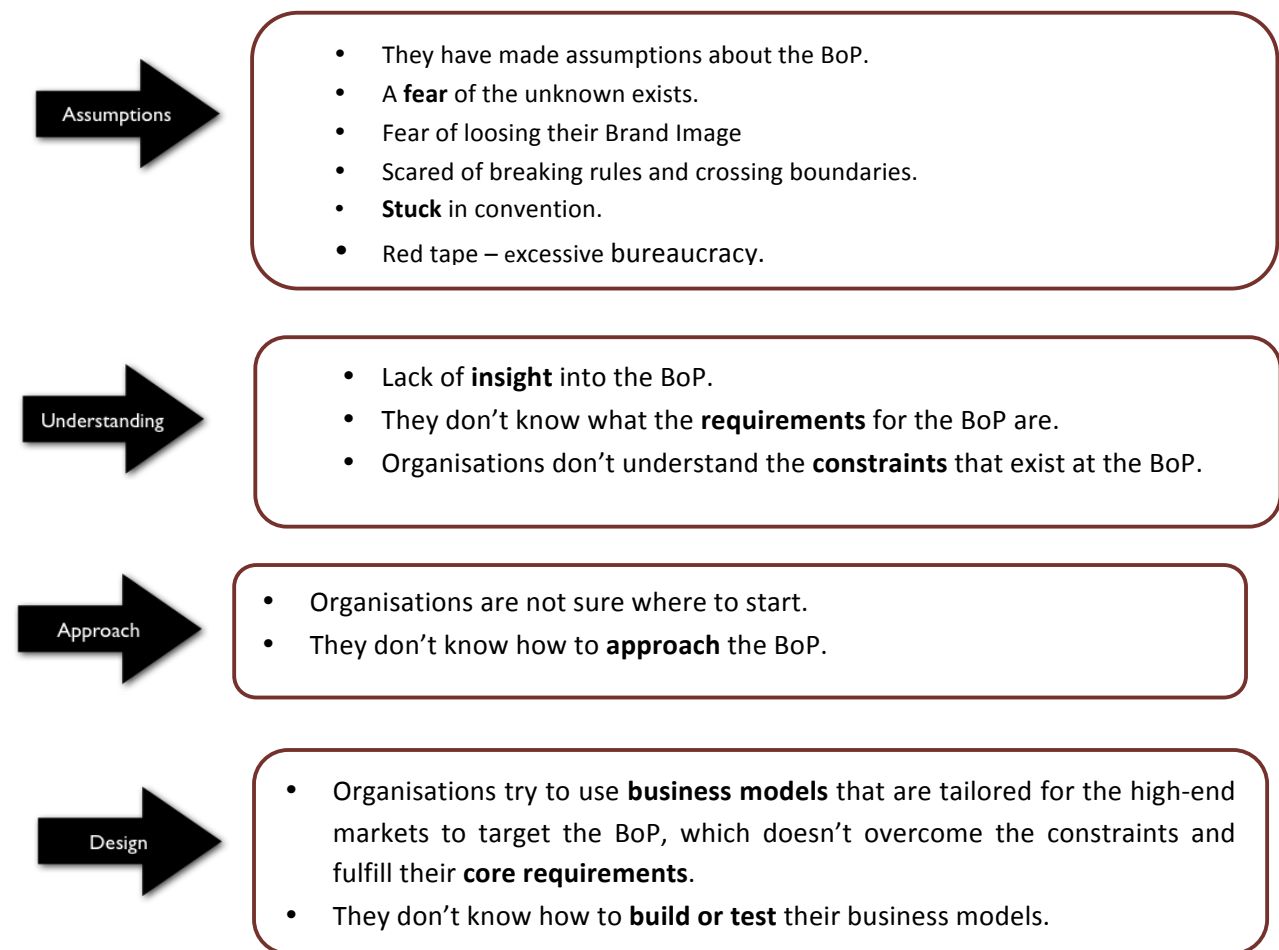
⁴ An organisation will increase their market size by including the BoP in their target market. If they target **only** the BoP, they might limit themselves and lose out on the customers at the high-end markets. Ensuring that the masses are attracted is important.

Appendix A

2. Problem Statement

Problem Statement: Organisations who are currently targeting high-end markets, are struggling to successfully expand into the BoP market while simultaneously promoting social equity and environmental quality.

Why organisations struggle to successfully target the Bottom



Some flawed assumptions that organisations make about the BoP (6) are:

- The poor have **no purchasing power** and no use for new products and services.
- The poor are **not brand conscious**.
- The poor are unable to use and are not interested in **advanced technology**.
- The poor are **hard to reach**.

Appendix A

Organisations must reexamine these assumptions. The sheer scale of the BoP population can make it an interesting market. A high social status⁵ in the BoP can be achieved by attaining status symbols⁶ like brands and technology. Conventional logic of distribution and marketing must be reanalyzed to reach isolated places. These assumptions result from constraints that exist at the BoP.

There are many constraints that the BoP population has to face each day. Constraints are limiting conditions that hinder the lifestyle of the BoP. Some of the biggest **constraints** the BoP face are (7):

- Low-income
- Lack of education and skills
- Proximity (isolated and distant locations)
- Cultural, lifestyle and language barriers
- Bad infrastructure
- Confidence due to lack of status

These constraints are some of the reasons organisations have difficulty in penetrating the BoP market.

The organisation must accept constraints, because breakthrough creativities and innovations require an open acknowledgement of limits (1).

The Hypothesis for my Thesis is as follows:

Hypothesis: If an organisation want to expand into the Bottom of the Pyramid (BoP) population successfully they must follow a strategy that gives them an approach to design a business model, and validate and adjust it at various stages of development to ensure that the risk of failure is minimized by fulfilling the core requirements of the BoP while simultaneously promoting social equity and environmental quality.

The Business Model Development Strategy will be discussed next.

⁵ Social status is the honour or prestige attached to one's position in society and the BoP use brands and material possessions as status symbols.

⁶ A status symbol is a perceived visible, external denotation of one's social position and perceived indicator of economic or social status.

Appendix A

3. The Business Model Development Strategy

The Business Model Development Strategy is a systematic approach to designing the BM, while also allowing the organisation to test the idea and business model at various stages to ensure that it fulfills the core requirements of the BoP, while making a profit and promoting environmental quality.

The Business Model Development Strategy consists of four main theories and methodologies:

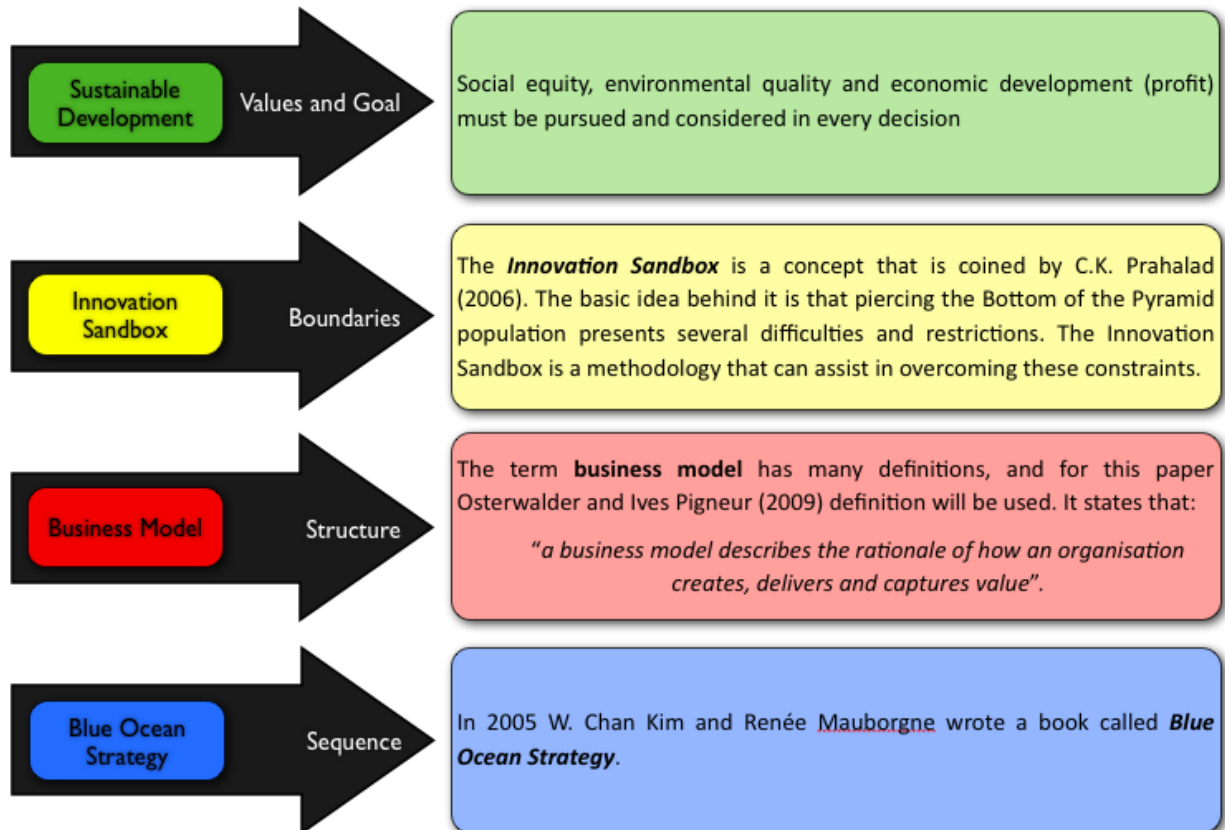
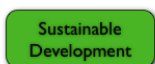


Figure 3: The theories and methodologies that contribute to the Business Model Development Strategy

These theories will be discussed in more detail next to show how they contribute to the Business Model Development Strategy.



3.1. Sustainable Development

The organisation must ensure that they are successful economically while not harming the environment and providing fair and equal opportunities to all people. Sustainable Development must be the goal of every organisation who wants to target the BoP.



3.2. Innovation Sandbox

Appendix A

C.K. Prahalad came up with the Innovation Sandbox which is a guide organisations can use to first figure out what the core requirements of the BoP are and then fulfill them by coming up with innovative solutions to resolve the problems and overcome the constraints (6). It is a problem solving tool which focuses on constraints to identify new opportunities.

Definition: Innovation Sandbox is a “fairly complex, free-form exploration and even playful experimentation (the sand, with its flowing, shifting boundaries) within extreme fixed specified constraints (the walls, straight and rigid, that box in the sand)” (6).

Anderson and Billou (8) observe that organisations that have achieved success in the BoP were normally those who have developed an approach that supplied the 4A's. The 4A's are core requirements that an organisation must fulfill to overcome the constraints that the BoP face. They are (8):

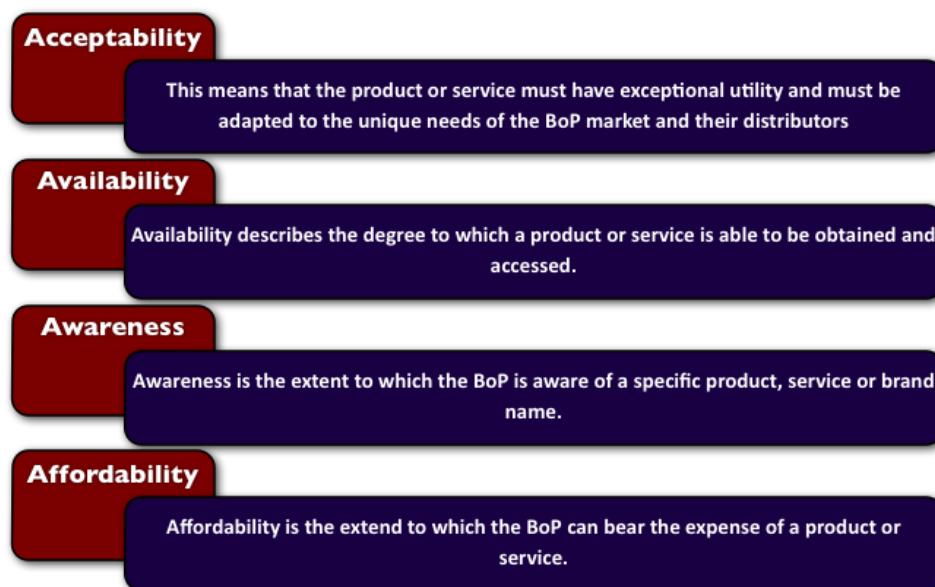


Figure 4: Anderson and Billou's 4A's (8)

The 4A's can be the walls of the innovation sandbox: the core requirements of the BoP. Each organisation must customize these core requirements for their industry and specific market. These core requirements are the crucial and necessary factors that have to be addressed in order to reach the BoP.

The **sand** is their creative playing field where organisations must come up with solutions (6).

It is very important to note that the organisation also has core requirements like profit, low cost, efficiency and effectiveness, market share, growth and development, and volume. **Volume** is a very important requirement for organisations who target the BoP,

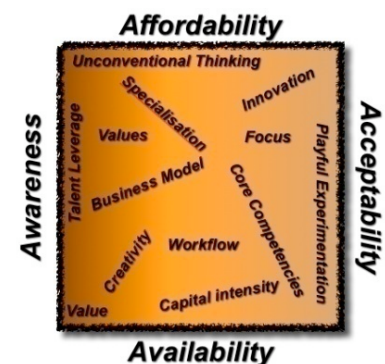


Figure 5: The Innovation Sandbox (adapted from C.K. Prahalad)

Appendix A

because of the small profit margins of this market, volume ensures that large profits are still made.

The organisation must understand the BoP population to be able to tailor their products and services to them, and stop trying to adjust high-end products and services to the needs of the BoP. Instead of taking a high-end business model and trying to cut away extras and excess to compete in the low-end market, a completely new, **unique business model** must be created from the ground up (1,4,6,9), to ensure that the biggest part of the population can be captured.

Business Model

3.3. Business Models

When an organisation wants to target the BoP, the entire business model must be re-evaluated and redesigned. The technology choices, distribution, marketing, pricing, scale, distribution, work flow and the organisation are all areas that needs rethinking, because fine-tuning the existing business model⁷ will not work (1).

Magretta (10) states that *“the business model’s great strength as a planning tool is that it focuses attention on how all the elements of the system fit into a working whole”*. Osterwalder and Pigneur’s business model canvas was the most comprehensive business model in literature and will therefore be used in this thesis.

Osterwalder and Pigneur developed the Business Model Canvas which is a framework that assists organisation in explaining and demonstrating their business models (11). The business model canvas that consists of nine building blocks that makes up a whole. The business model canvas is described in the Figure 6 below.

⁷ A business model *“describes the rationale of how an organisation creates, delivers and captures value”* (11).

Appendix A

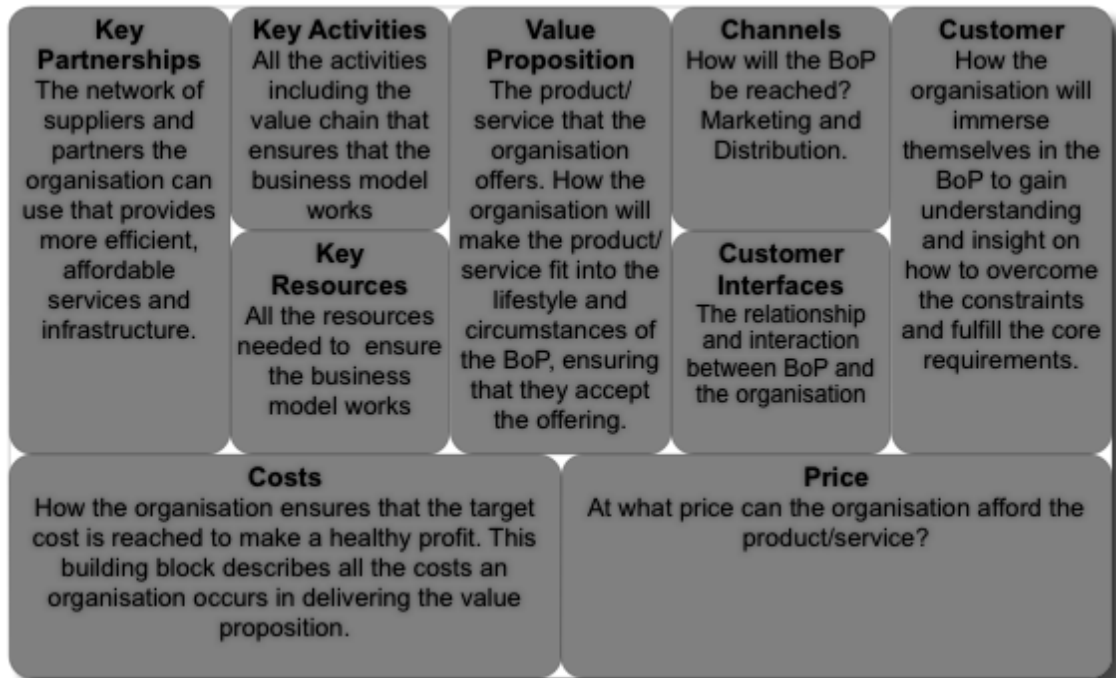


Figure 6: The Business Model Canvas: Adapted for the BoP (Source: Osterwalder and Pigneur 2009)

The business model canvas consists of nine building blocks, that work together to show the business and money making logic of the organisation (12). The business model components have to be considered to create value for the organisation and the customer.

Blue Ocean Strategy

3.4. Blue Ocean Strategy

The BoP is uncharted territory for many organisations. Kim and Mauborgne say that **Blue oceans** represent all those industries that aren't in existence today. The term **red ocean** denotes all the industries that exist. This market is known and the industry boundaries are specified and accepted. In this market companies fight for market share and try to grab a bigger piece of the existing demand (13).

Blue Oceans are defined by untapped market space, demand creation and the opportunity for highly profitable growth (4). Blue oceans are currently unknown and completely untainted by competition. The blue ocean strategy locates new customers and creates new markets by pushing the boundaries of existing industries. The BoP has the potential to be a very lucrative blue ocean, because they have never been really considered as a viable market. Value Innovation, which promotes low cost and good value simultaneously, is a cornerstone of Blue Ocean Strategy.

Kim and Mauborgne (14) have identified a strategic sequence that organisations can follow to develop and test their blue ocean ideas, which will minimize business model risk. The strategic sequence is a principle of Blue Ocean Strategy.

Appendix A

Strategic Sequence

The strategic sequence assists the organisation with improving the commercial value of concepts. A new product/service must offer customers benefits and outstanding utility at a price that is affordable to them, while the organisation must make a good profit at the same time (14). Kim and Mauborgne (4) discuss a specific strategic sequence that organisations must follow in order to validate their concept for commercial success. The strategic sequence is an initial litmus test to evaluate the readiness and commercial potential of a new business idea (14). By following this order they claim that some of the business model risk can be reduced. The sequence is utility, price, cost and adoption.

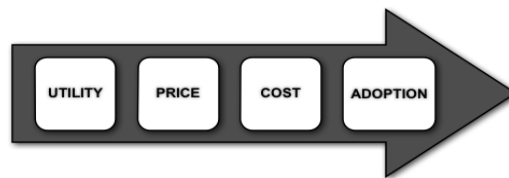


Figure 7: The Blue Ocean Strategic Sequence (Adapted from Kim and Mauborgne)

1) Creating Exceptional Utility⁸

The first step in getting the strategic sequence right is making sure that the product/service offers exceptional utility. This step evaluates the likelihood that customers and non-consumers will be attracted to the new product. It is important to understand that *“how a product is developed becomes less a function of its technological possibilities and more a function of its utility to customers”* (14). When a new product/service is designed, the organisation must ensure that the product/service attracts the target market.

2) Setting the Strategic Price

To ensure that an organisation achieves satisfactory revenue, they have to set their strategic price right to attract the masses (4). It is important that organisations set their price so that the biggest possible segment of the population can afford their product/service. Not only must an organisation ensure that buyers wish to buy the product/service but that they also have the ability to pay for it.

3) Target Costing

Once an organisation has set its strategic price, they need to consider the amount of profit they want to make. Kim and Maugborne say that *“to maximize the profit potential of a blue ocean idea, a company should start with the strategic price and then deduct its desired profit margin from its price to arrive at the target cost”* (4). This is absolutely essential to ensure that the cost structure is profitable and difficult to imitate.

Reaching target costs ensure that an organisation earns sufficient profits. Target costing addresses the profit side of the business model (4).

⁸ Utility: the state of being useful, profitable, or beneficial (New Oxford American Dictionary)

Appendix A

4. The Business Model Development Strategy

Combining the components of Osterwalder and Pigneurs Business Model Canvas (11) with Kim and Mauborgne's strategic sequence each building block will be placed in a specific strategic sequence and a framework will be created to build and test a business model. Combining the Business Model Canvas and the Blue Ocean's strategic sequence will yield the Figure 8:

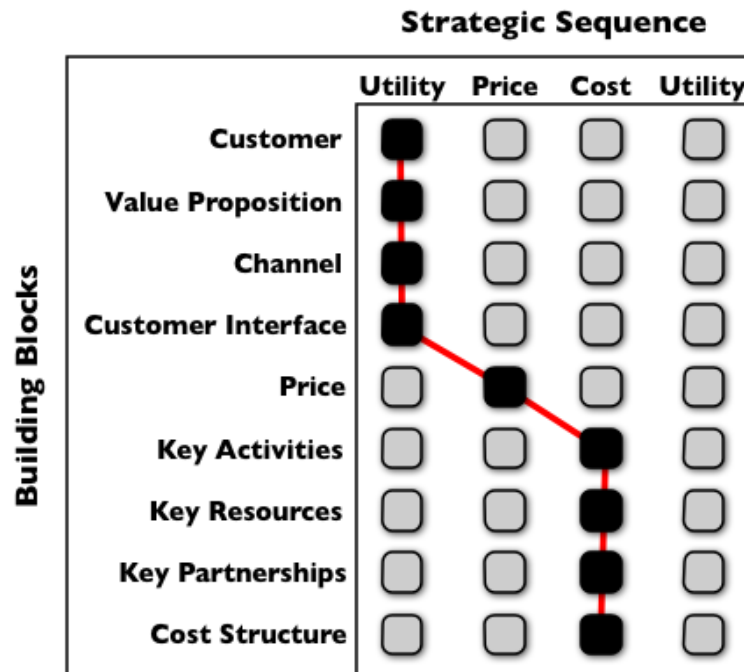


Figure 8: Combining the business model and the strategic sequence

Figure 8 shows that Customer, Value Proposition, Channels and Customer Interface falls under Utility. Price falls under price, and Key Activities, Key Resources, Key Partnerships and Cost Structure falls under Cost. Therefore the sequence that an organisation must follow when developing and designing each building block of the business model is established. Figure 8 gives the figuration and approach of the Business Model Development Strategy.

The order of the Business Model Development Strategy is as follows:

1. Customer
2. Value Proposition
3. Channel
4. Customer Interface
5. Price
6. Key Activities
7. Key Resources
8. Key Partnerships
9. Cost Structure

Appendix A

By testing each component before designing the next one, the organisation will ensure that the business model is more viable.

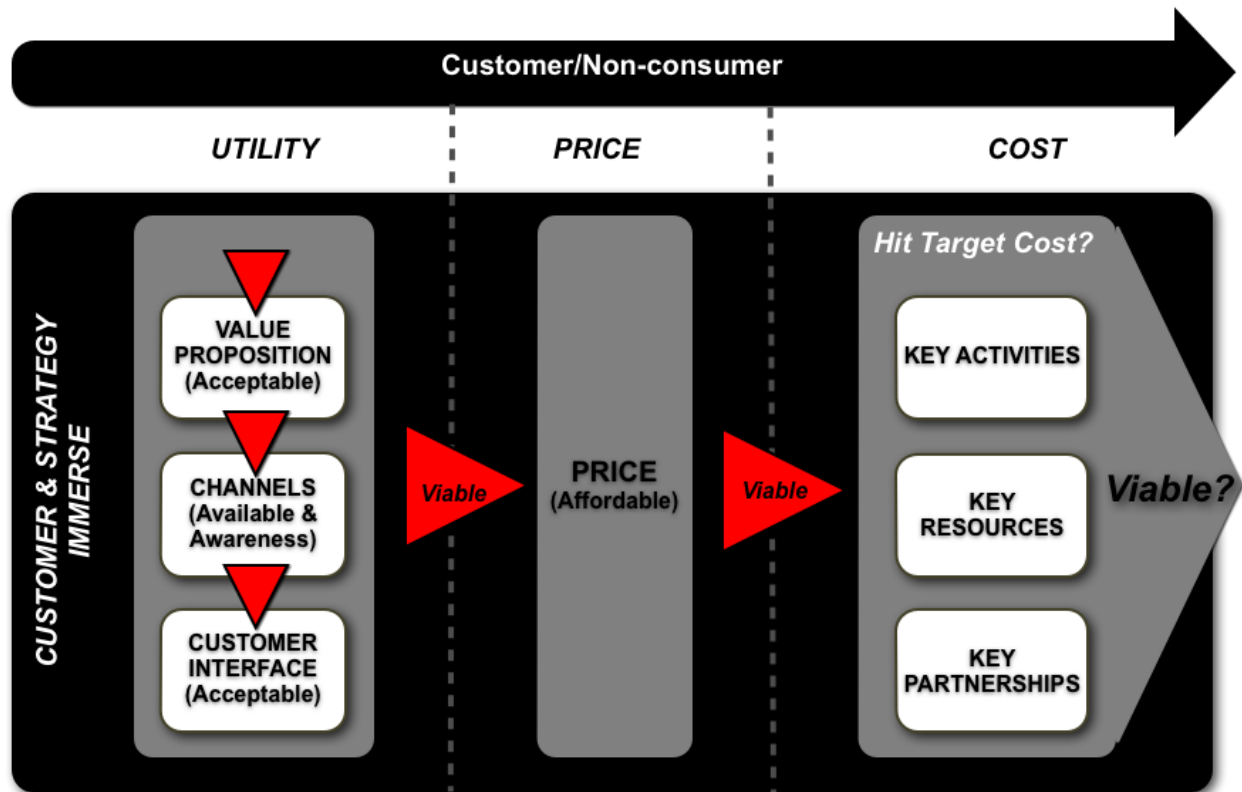


Figure 9: The Business Model Development Strategy

The first purpose of the Business Model Development Strategy is to give an organisation an approach to target the BoP: To show and guide them where to start. The second purpose is to test the viability of each component and step, as well as the whole concept. After the development of each building block, the organisation must assess the results and decide whether the idea is still viable. Otherwise the business model needs to be put on halt, until feasible, realistic solutions can be obtained. The organisation must fulfill the core requirements of the BoP, the 4A's, as well as ensure that the organisation can make a profit.

Each step of the Business Model Development Strategy will be discussed and explored next.

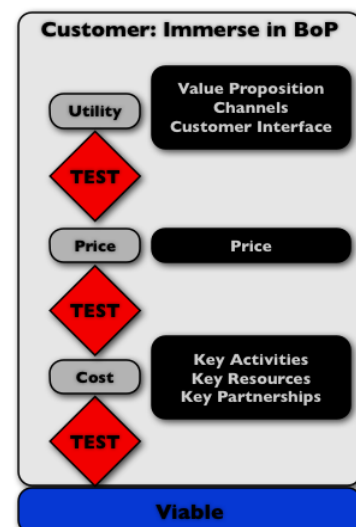


Figure 10: Testing the components of the business model

Appendix A

5. The Components of the Business Model Development Strategy

Each organisation must find information and details that are relevant to their industry, company and market segment.

The Innovation Sandbox (6) can be converted into a visual representation to organize the information gained from the BoP. This is the **Innovation Sandbox Process** (Figure 11), a structured method that identifies the constraints and core requirements for each component of the business model. The three parts of the Innovation Sandbox Process are:

- 1) Define the Constraints that hinder success in the BoP
- 2) Define the Core Requirements (Walls)
- 3) Thinking inside the Box (Playing in the Sand)
 - Unconventional thinking, creativity and problem solving
 - Blue Ocean Strategy, Business Model, Innovation Sandbox and Sustainable Development tools
 - Some other possible tools

The constraints and requirements identified will put the BoP into context. This allows organisations to use innovation, unconventional thinking, creativity and problem solving to come up with solutions that will overcome constraints, and fulfill the core requirements of the BoP and organisation.

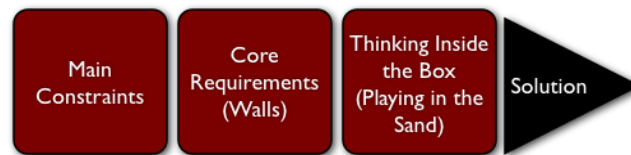


Figure 11: The Innovation Sandbox Process (Adapted from C.K. Prahalad's Innovation Sandbox)

The Innovation Sandbox Process considers the content of each of the components in the Business Model Development Strategy, to find solutions.

The constraints, requirements and any other relevant information must be deduced from the research done in the BoP (in the first step of the BMDS: Customer).

Appendix A

5.1. Customer and Strategy

The first step in the Business Model Development Strategy is an **approach** for an organisation to understand the circumstances and context the Bottom of the Pyramid population live in. This stage includes a lot of research, analysis and exploration. Figure 12 shows the six steps must be followed by an organisation to understand the industry as well as the BoP.

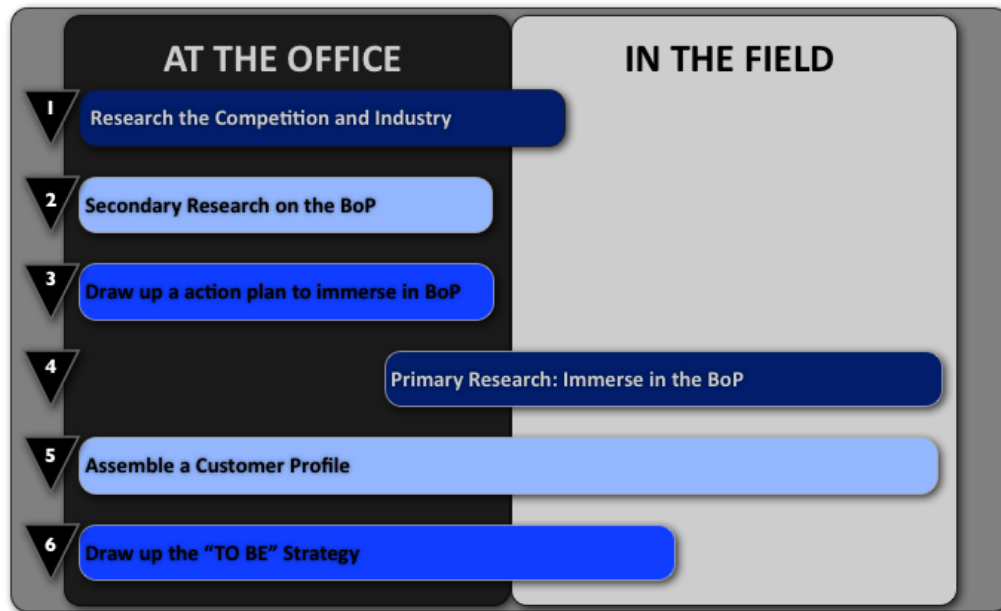


Figure 12: The six steps for an organisation to immerse themselves n the BoP and gain insight and understanding of the industry and the BoP

The steps will be discussed in more details next:

▼ Researching the Competition and the Industry

- Helps an organisation understand where they are placed within the industry
- Identify the factors of competition
- Identify the main competitors and where they are situated in the industry.
- Draw up the organisation's "As Is" Strategy using the **strategy canvas**⁹

⁹ The strategy canvas is an analytical framework developed by Kim and Mauborgne (4) that uncovers the competitive factors the organisation and its competitors focus on in an industry. The strategy canvas allows an organisation to visually see where their strategy is situated in relation to their competitors, thus providing guidance on how to exploit competitors' weaknesses and attract larger volumes.

Appendix A

2 Secondary Research

- Research into information and studies about the BoP that have already been conducted like census, formal research and case studies.
- Do a PEST analysis.

3 Plan of Action

The organisation must draw up a plan of how they are going to approach the BoP to study them, and they should answer the following questions:

- What are you looking for?
- What activities are you planning?
- Who are you targeting?
- How will you target them?
- Where will you target them for research?
- When will you target them?
- What actions will you take?
- It is very important that the organisation is brutally honest explicitly defines any assumptions and prejudices they have about the BoP. These assumptions and prejudices must then be tested in the primary research.

4 Primary Research

The organisation must immerse themselves into the BoP by going into the field and observing the lifestyle¹⁰ of the BoP to gain insights into the way they do things and determine their constraints and requirements. The organisation must study the BoP and find out the following to gain insight into the BoP market:

Needs and core requirements	Attitude and frame of mind – their worldview.
Routines and habits – the conventional ways of doing things.	Situation and obstacles.
Behaviours – their reasoned actions.	Interests and pastimes.
Influences	Culture and traditions.
Livelihood and occupation.	Education

Figure 13: Information about the BoP

The assumptions about the BoP must be tested.

¹⁰ Lifestyle denotes the way in which a group of people live. When an organisation analyzes the lifestyles of the BoP, they examine the way people live instead of where they live (geographically), their income, their age or their demographics (19).

Appendix A

5 Customer Profile

Summary of the findings, research and immersion of the BoP and entails:



Figure 14: The Customer Profile

6 “To Be” Strategy

Drawing up a strategy that will assist in designing the new business model components:

1. Discuss and decide on a new strategy. The new strategy must have
 - **Focus**¹¹
 - **Divergence**¹²
 - **A Compelling Tagline**¹³
2. Four Actions Framework¹⁴ – get new factors of competition
3. Draw up the “To Be” Strategy Canvas
4. Get Feedback and refine strategy
5. Decide on the outcomes of the business model
6. Use new strategy to build and test the new business model

The new strategy must become a reference point for the decisions that have to be made about designing the business model. The new business model must be designed to support the new strategy.

The organisation must explore and analyse the lives of the BoP to understand how they are different from their current market and why they are often non-consumers. This Customer step is very important in the Business Model Development Strategy, and without thorough exploration, investigation and inquiry, the organisation might make unsuitable assumptions and decisions that can lead to failed ventures.

¹¹ The organisation can’t do all things and be all things to all people, but they need to **do a few things very well**. (4)

¹² The strategy of an organisation must be unique and different to that of competitors (4).

¹³ “A good tagline must not only deliver a clear message but also advertise an offering truthfully, or else customers will lose trust and interest.”(20)

¹⁴ The Four Actions Framework was created by Kim and Mauborgne (4) to overcome the compromises that the industry forces customers to make. Cost savings are made by **eliminating** and **reducing** some feature that the industry takes for granted and doesn’t add value, and the value for the customer is increase by **raising** and **creating** elements that the industry has never offered before (4).

Appendix A

5.2. Value Proposition

The Value Proposition is the product or service that an organisation offers its customers. It must be suitable to the needs of the BoP and offer utility and value to them.

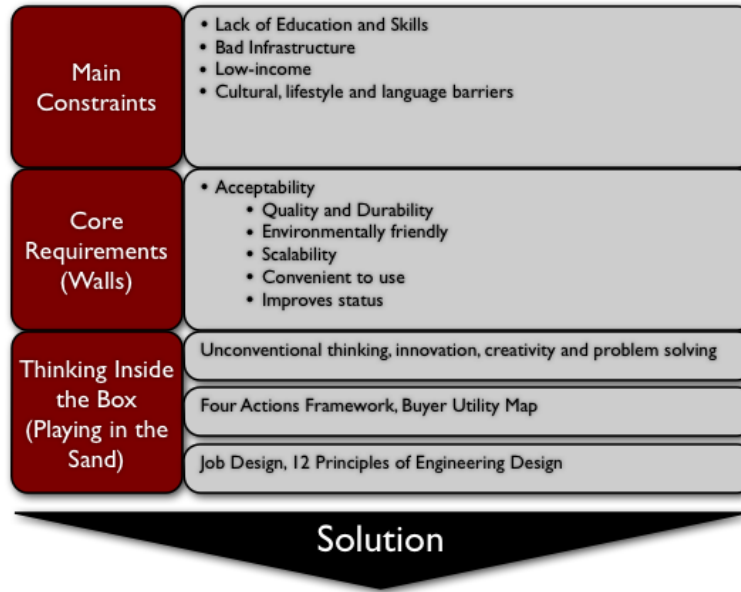


Figure 15: The Innovation Sandbox Process for the Value Proposition

The core requirement of the BoP for this building block is the **Acceptability** of the products and services. Figure 15 shows the information for the innovation sandbox process.

The offering needs to be easy to use, because the BoP often lacks education and skills, and complicated products and services can intimidate them and make them seek substitutes and alternatives. *"Marketers also need to understand that the competition they face in such a market is not just from other brands within a product line but from other product categories altogether, as due to budget restrictions, low income consumers face choices between two entirely different types of products, rather than choices between brands"* (15).

It is important that organisations don't just strip down their existing products, but actually develop a special product for the BoP market that offers exceptional utility from purchase to use to maintenance and then disposal. They can use the Buyer Utility Map¹⁵ to assist them.



Is the product/service accepted by the BoP? Does it offer utility to its customers and non-consumers? If yes, move onto the next step, else rethink the Value Proposition!

¹⁵ The Buyer Utility Map helps managers understand all the different levels and phases where they can improve utility and value (4).

Appendix A

5.3. Channels

The channel step includes all the **Marketing and Distribution** activities that an organisation needs to fulfill in order to make potential customers aware of the product/service and ensure that it's available.

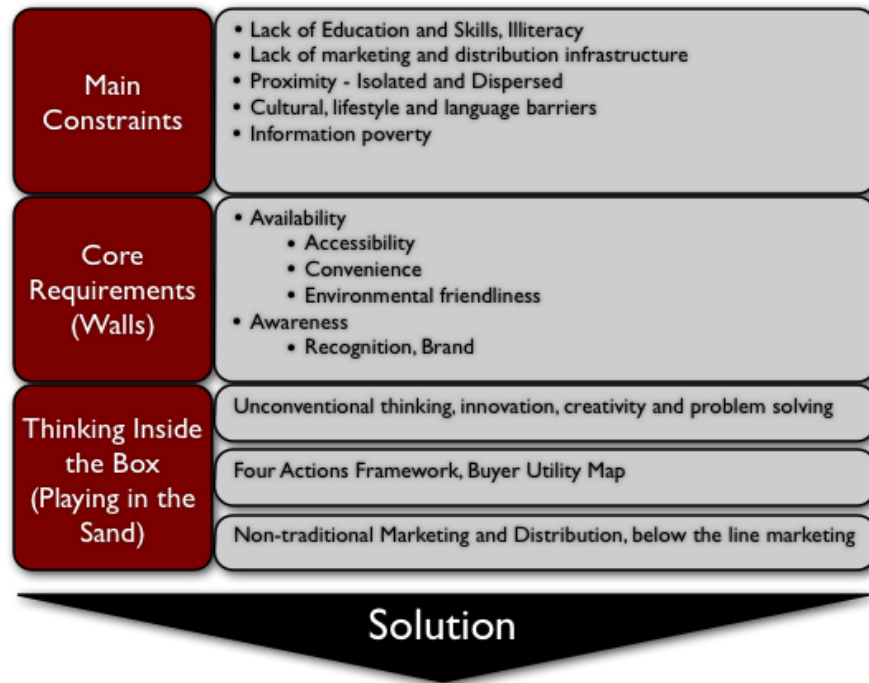


Figure 16: The Innovation Sandbox Process for Channels

The organisation must understand the buying habits and the preferred communication channels of the BoP. Store owners have a great influence over the BoP by what they stock and recommend. Many of the BoP are illiterate and therefore visual communication is very important. The Four Actions Framework can be used to find solutions to the channel problems. The core requirements of the channel components are **Awareness** and **Availability**. Bad infrastructure, isolation and information poverty are also constraints that organisation who want to target the BoP face daily.



Is the BoP **AWARE** of the product/service and is it **AVAILABLE**? If yes, move onto the next step, else rethink the Channels!

Appendix A

5.4. Customer Interface

The Customer Interface stage ensures that the interaction the customer has with the organisation is easy and convenient. **Acceptability** and hence simplicity are the most important functions of the interface. The customer must be comfortable to use the product and interact with the organisation. The BoP are often first-time users who are intimidated by difficult and long procedures.

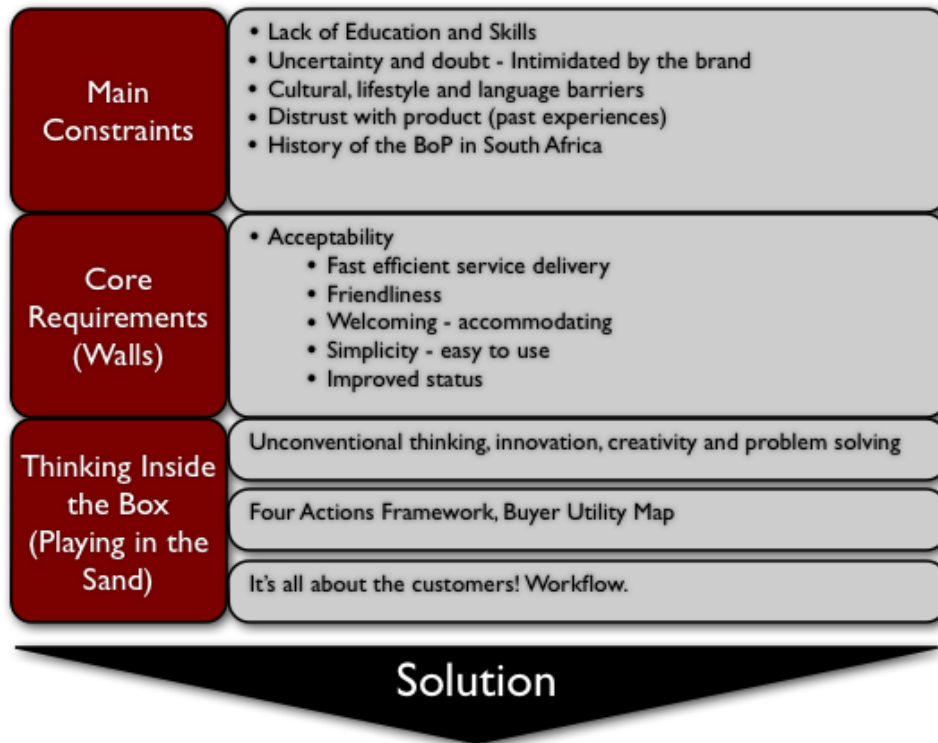


Figure 17: The Innovation Sandbox Process for Customer Interface

Therefore an organisation must develop plans, methods and routines that make the buying experience easier and more enjoyable. The organisation must be approachable and inviting to ensure that the customers who lack skills and have cultural or language barriers aren't anxious and frightened to approach the shop floor. The organisation must make themselves acceptable by making all their customer processes easy, friendly and straightforward.



Is the Customer Interface ACCEPTABLE to the BoP? Do they feel welcome and find the interface easy to use? If yes, move onto the next step, else rethink the Customer Interface!

Appendix A

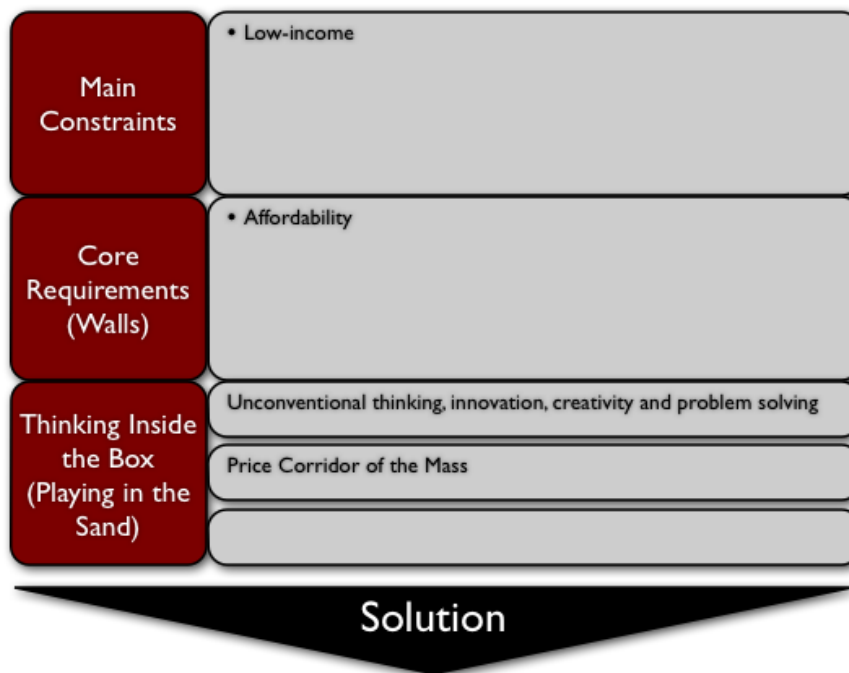
5.5. Price

Organisations often want to ‘*test the waters*’ first by targeting those customers who seek new products and are price insensitive. They will launch their products at a high price and then drop it over time to attract the mass of the customers (14). Kim and Mauborgne (4) argue that from the start organisations must price their product to capture the **mass of the market**. It is important that organisations determine the price that will allow them to capture a large pool of customers quickly.

The price an organisation chooses must not only attract the mass market, but also assist the organisation in retaining them (4). The offering must be affordable for the BoP. Many organisations are very vulnerable to imitations and free-riding. Customers must be convinced that they are receiving the best value at the best price in order to remain loyal. Therefore organisations must offer the customers something they can’t resist.

Imitation is a reality when knowledge and ideas are involved, because the leader bears all the costs and risks in developing the new ideas, while the follower can learn from their mistake (16), and apply the ideas and knowledge to their own organisation.

Kim and Mauborgne (16) propose that the organisation must strategically price the product from the



beginning to ensure that the mass of buyers are captured. The strategic price and rapid brand recognition build by the organisation will discourage imitators and make it very difficult to catch up to the economies of scale and learning advantages the organisation has gained, and it makes the competition almost irrelevant.

The core requirement that needs to be fulfilled in the revenue building block is **Affordability**.

Figure 18: The Innovation Sandbox Process for Price



Does the product/service that the organisation offers **AFFORDABLE**? If yes, move onto the next step, else rethink the Price!

Appendix A

Up to this point in the Business Model Development Strategy the focus was on fulfilling the core requirements of the BoP, to attract large volumes. But to ensure that an organisation still makes a healthy profit whilst targeting the BoP, they need to keep their costs as low as possible.

5.6. Key Activities

The key activities that organisations use must be streamlined by using methods that make the system more effective, efficient and to reduce costs.

All the assumptions an organisation has from the manufacturing to distribution activities need to be questioned. Typical questions that can be asked to challenge assumptions are (4):

- Can high-cost, low-value-added activities in the value chain be significantly eliminated, reduced or outsourced?
- Can the number of parts or steps used in production be truncated by shifting the way things are made? Can activities be digitized to reduce costs?

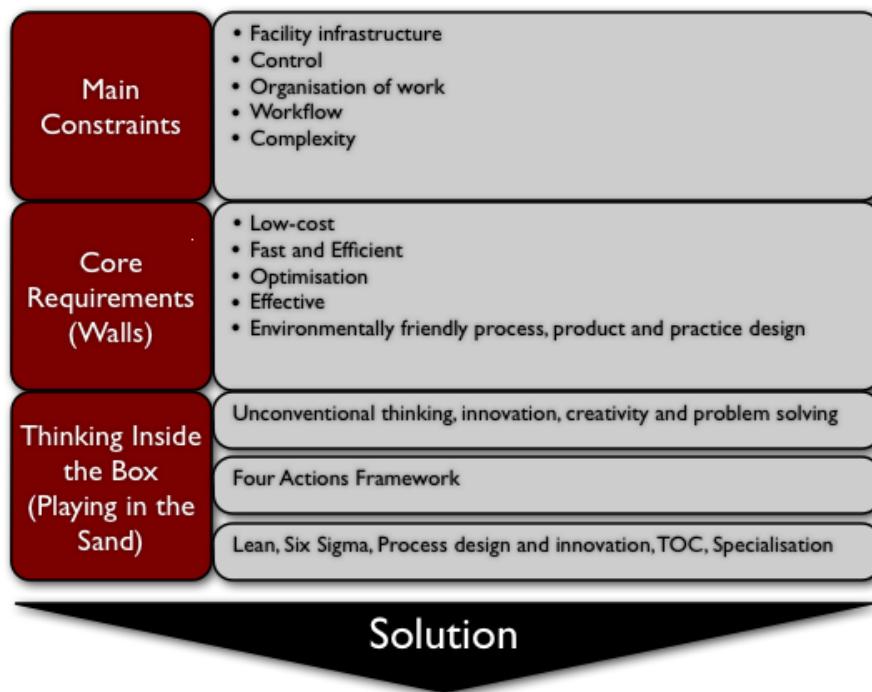


Figure 19: The Innovation Process for Key Activities

The Four Actions Framework is an effective tool to streamline the activities and find cost and value innovations. The organisation must aim to make their whole value chain fast and effective, while reducing costs.



Are the Key Activities optimised, effective and efficient to ensure that the cost is as low as possible while not compromising quality? Are all products, processes, practices and premises designed keeping the environment, low costs and efficiency in mind?

Appendix A

5.7. Key Resources

High resource prices increases the cost of the product/service, and leads to lower profit margins. The resource intensity of organisations must be reduced and alternative or more affordable, renewable resources need to be used without compromising quality. All the assumptions an organisation has about resource use from the manufacturing to distribution activities need to be questioned. Typical questions to challenge assumptions are (4):

- Can the raw materials of the product or service be replaced by unconventional, less expensive ones?
- Can the physical location of the product or service be shifted from prime real estate locations to lower-cost locations?
- What are the most expensive resources and how can they be decreased?

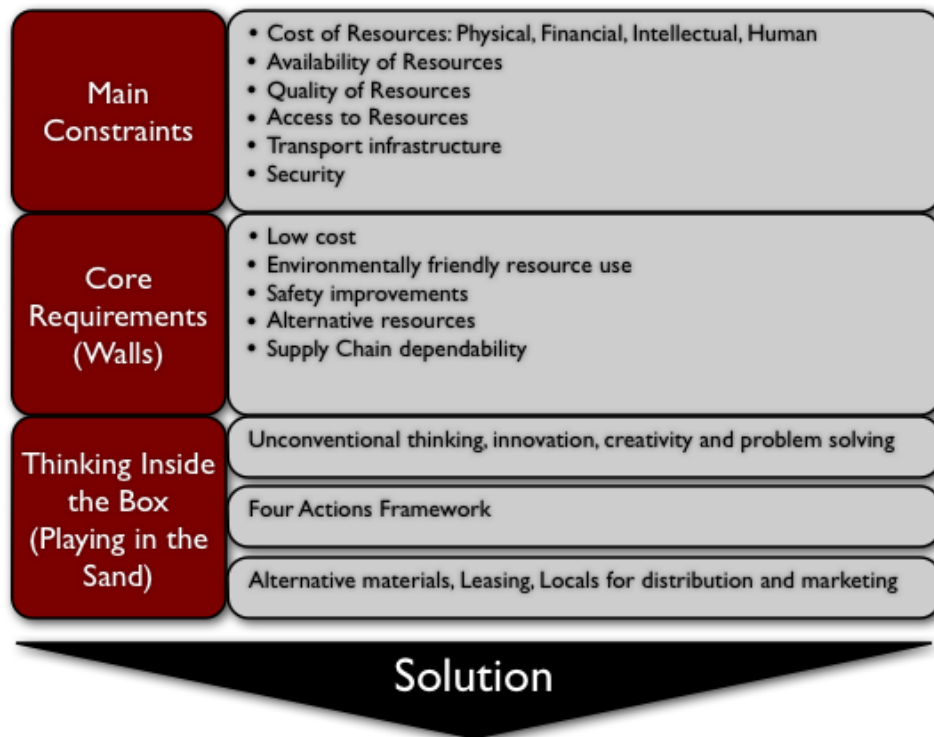


Figure 20: The Innovation Sandbox Process for Key Resources

The Four Actions Framework is an effective tool to streamline the activities and resources and find cost innovations.



Are alternative resources and methods to reduce resource use considered? Are the resources that the organisation uses environment friendly?

Appendix A

5.8. Key Partnerships

Many organisations try to do all the manufacturing and distribution activities themselves. This can cause time delays and Kim and Mauborgne (14) state: *“Time works against the innovator in favour of the imitator”*. Organisations must realize that they aren’t the best at everything and must rather look outside to organisations that can fill the gaps that exist in their capabilities. Certain capabilities can be secured quickly and effectively through collaboration.

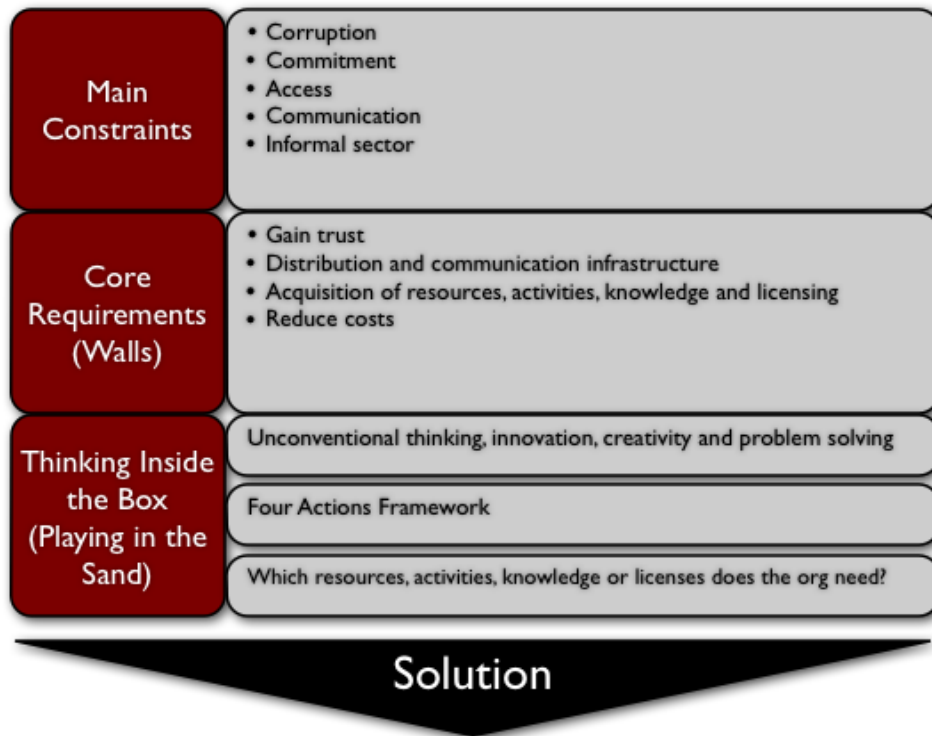


Figure 21: The Innovation Sandbox Process for Key Partnerships

Other organisation’s expertise, distribution channels and economies of scale can be leveraged (4). An organisation needs to answer the following questions to ensure that they always have the best possible capabilities (14):

- What are the capabilities that an organisation needs to achieve its value proposition, and of those, which does the organisation lack?
- Which other organisations have those missing capabilities?



Are all possible partnerships considered that can assist an organisation in cutting costs and improving efficiency and reach?

Appendix A

5.9. Cost Structures

When a cost structure of an organisation is driven by strategic pricing, the key resources and activities of the business model must be set up from the beginning to be lean and profitable (14). A good business model with a low cost structure is very difficult to imitate. Kim and Mauborgne (14) argue that when organisations are basing *“their cost targets on the market-driven strategic price and refusing to allow overruns, they force their organisation to question virtually every assumption about materials, design, and manufacturing – often with surprising results”*. The lower the costs are that an organisation face, the higher the profits they make.

Organisations can reduce costs by using smaller or more affordable packaging, or scaling down on existing product, while still offering exceptional value. Cost reductions are an absolute necessity, and sometimes it is enough to reach the cost target. But often this is not the case. An organisation must find creative ways to meet the target cost. Kim and Mauborgne (4) show that organisations have three principle levers that they can use to hit their cost targets:

- Pricing model (changing the pricing model: how products/services are priced). The aim of changing the pricing model is not to jeopardize the strategic price but to reach the target costs.
- Key resources and key activities (Streamlining and cost innovations)
- Key partnerships

The following three components of the business model can assist an organisation with achieving the target cost:

- Key Activities
- Key Resources
- Key Partnerships

And then for the final test:



Can the organisation reach the Target Cost using Key Activities, Key Resources and Key Partnerships? If yes, the idea and business model is viable!

6. Conclusion

The Business Model Development Strategy (BMDS) is a starting point for organisations that want to target the Bottom of the Pyramid population. The BMDS gives a systematic approach to solving a problem. The BMDS doesn't give organisations a solution, but provides a framework wherein they can use unconventional thinking, innovation, and creativity to come up with their own solution.

Appendix A

7. References

- (1) Prahalad C. The Fortune at the Bottom of the Pyramid. : Wharton School Publishing; 2006.
- (2) Hart S, Prahalad C. The fortune at the bottom of the pyramid. *Strategy Business* 2002;26:54-67.
- (3) Porter ME. From competitive advantage to corporate strategy. *Harv.Bus.Rev.* 1987;65(3):43-59.
- (4) Kim WC, Mauborgne R. Blue ocean strategy. : Harvard Business School Press Boston, MA; 2005.
- (5) Hasna AM. Dimensions of sustainability. *Journal of Engineering for Sustainable Development: Energy, Environment, and Health* 2007;2(1):47-57.
- (6) Prahalad C. The innovation sandbox. *STRATEGY AND BUSINESS* 2006;44:62.
- (7) World Bank. Voices of the Poor. World Bank 2007.
- (8) Anderson J, Billou N. Serving the world's poor: innovation at the base of the economic pyramid. *J.Bus.Strategy* 2007;28(2):14-21.
- (9) Christensen CM. The innovator's dilemma: when new technologies cause great firms to fail. : Harvard Business School Press; 1997.
- (10) Magretta J. Why business models matter. *Harv.Bus.Rev.* 2002;80(5):86-93.
- (11) Osterwalder A, Pigneur Y. Business Model Generation. : Self Published; 2009.
- (12) Osterwalder A. The Business Model Ontology-a proposition in a design science approach. *Ecole des Hautes Etudes Commerciales* .
- (13) Kim WC, Mauborgne R. Blue Ocean Strategy. *Harv.Bus.Rev.* 2004.
- (14) Kim WC, Mauborgne R. Knowing a winning business idea when you see one. *J.Prod.Innovation Manage.* 2001;18(2):123.
- (15) Synovate. Rich insights into low income consumers
. Synovate In:fact 2006 November 2006:29 March 2010.
- (16) Kim WC, Mauborgne R. Strategy, value innovation, and the knowledge economy. *Sloan Manage.Rev.* 1999;40:41-54.
- (17) Brundtland GH. World Commission on Environment and Development. Our common future 1987:8-9.
- (18) Ecotrust. Reliable Prosperity: Social equity. Available at:
http://www.reliableprosperity.net/social_equity.html. Accessed 20 August 2010, 2010.
- (19) Pinkovitz B. Using Lifestyle to Analyze Market Potential. CCED 1997 February 1997.
- (20) Kim WC, Mauborgne R. Charting your company's future. *Harv.Bus.Rev.* 2002;80(6):76-85.

Appendix B: Evaluation Document – Survey Questions

A Business Model Development Strategy

Targeting the Bottom of the Pyramid Population

Evaluation Document – Part 2

Survey Questions

October 2010

Tanye ver Loren van Themaat

082 450 8472

tanye@sun.ac.za

Appendix B

Name:

Interviewee background

- Occupation/background

- Previous experience in Enterprise Engineering and Business Model Design

- Previous experience in Strategy

- Previous experience in the low-income population (The Bottom of the Pyramid Population)

Appendix B

Survey Questions

Please answer the following questions:

1. Viability and Feasibility

On a Scale of 1 to 5, with 5 being strongly agree and 1 being strongly disagree, please answer the following questions and **motivate your answer**:

5= Strongly Agree 1= Strongly Disagree

Question	1	2	3	4	5	Motivation
1.1 To what extent do you agree that organisations need to reexamine widely accepted orthodoxies ¹ about strategy, business practice and market research when they want to target the BoP? (Refer to Chapter 1 in the main document)						
1.2 To what extent do you agree that organisations have to deliver both value as well as low-costs to the BoP to be successful? (Refer to Chapter 1 in the main document)						
1.3 To what extent do you agree that an organisation who wants to target the BoP has to rethink and innovate their business model?						

1.4 Do you think the BoP can be a feasible market to target if their core requirements are fulfilled (Refer to Chapter 3.2 in the main document)?

¹ Orthodoxy: authorized or generally accepted theory, doctrine, or practice (New Oxford American Dictionary)

Appendix B

2. Bottom of the Pyramid (BoP)

On a Scale of 1 to 5, with 5 being strongly agree and 1 being strongly disagree, please answer the following questions and **motivate your answer**:

5= Strongly Agree 1= Strongly Disagree

Question	1	2	3	4	5	Motivation
2.1 To what extent do you agree that organisations make flawed assumptions about the BoP? (Refer to Chapter 2 in the main document)						
2.2 To what extent do you agree with the main reasons why organisations don't/can't successfully target the BoP population? (Refer to Chapter 2 in the main document)						
2.3 To what extent to you agree with the constraints that exist at the BoP? (Refer to Chapter 2 in the main document)						
2.4 To what extent to you agree with the core requirements (4As) that must be fulfilled in						

Appendix B

the BoP population? (Refer to Chapter 3.2)						
2.5 To what extent to you agree that the BoP is a market that is not targeted efficiently ? (Refer to Chapter 2 in the main document)						

3. Sustainable Development

On a Scale of 1 to 5, with 5 being strongly agree and 1 being strongly disagree, please answer the following questions and **motivate your answer**:

5= Strongly Agree 1= Strongly Disagree

Question	1	2	3	4	5	Motivation
3.1 To what extent to you agree that Sustainable Development is an essential part of targeting the BoP? (Refer to Chapter 1 and 3.1 in the main document)						
3.2 To what an extent do you agree with the three Goals an organisation must pursue when targeting the BoP: Profit, Social equity (by making products/services equally available to all people) and ensuring the environment isn't harmed? (Refer to Chapter 1 and 3.1 in the main document)						

Appendix B

4. Business Model Development Strategy

On a Scale of 1 to 5, with 5 being strongly agree and 1 being strongly disagree, please answer the following questions and **motivate your answer**:

5= Strongly Agree 1= Strongly Disagree

Question	1	2	3	4	5	Motivation
4.1 To what extent do you agree that the following building blocks of Osterwalder and Pigneur's business model fall under Utility: Customer, Value Proposition, Channels, and Customer Interface? (Refer to Chapter 4 in the main document)						
4.2 To what extent do you agree that the following building blocks of Osterwalder and Pigneur's business model fall under Cost: Key Activities, Key Resources, Key Partnerships and Cost Structures? ((Refer to Chapter 4 in the main document)						
4.3 To what extent do you agree with the structure of the Business Model Development Strategy? (Refer to Chapter 4 in the main document)						
4.4 Do you think that the BoP can be a possible blue ocean? (Refer to Chapter 3.4 in the main document)						

Configuration and Approach

Appendix B

4.5 A business model that is designed to target the BoP must address Utility of the product/service first, and then the Price that the BoP can afford, and then they must innovate to reach their Target Cost to ensure they still make a profit (Refer to Chapter 3.4 in the main document). Do you agree with this statement? Any comments?

Content

On a Scale of 1 to 5, with 5 being strongly agree and 1 being strongly disagree, please answer the following questions and motivate your answer:

5= Strongly Agree 1= Strongly Disagree

Question	1	2	3	4	5	Motivation
4.6 To what extent do you agree that the Innovation Sandbox Process will help summarise and put the BoP in context to be able to come up with solutions to fulfill the requirements of the BoP? (Refer to Chapter 5)						

Appendix B

<p>4.7 To what extent do you agree that an organisation will achieve greater success if they first immerse² themselves in the BoP to gain insight into their needs and lifestyles, before designing the business model?</p> <p>(Refer to Chapter 5.1 in the main document)</p>						
<p>4.8 To what extent do you agree with the approach (Customer: Six Steps) the organisation must take to immerse themselves in the BoP?</p> <p>(Refer to Chapter 5.1.1-5.1.6 in the main document)</p>						

² Immerse: *figurative* involve oneself deeply in a particular activity or interest (New Oxford American Dictionary). Absorb in, engage in.

Appendix B

5. Testing

On a Scale of 1 to 5, with 5 being strongly agree and 1 being strongly disagree, please answer the following questions and **motivate your answer**:

5= Strongly Agree 1= Strongly Disagree

Question	1	2	3	4	5	Motivation
5.1 To what extent do you agree that the core requirements (4A's), as well as utility, price and cost, are feasible tests to minimize risk of failure? (Refer to Chapter 5 in the main document)						
5.2 To what extent do you agree that the Blue Ocean Strategy's strategic sequence combined with the Innovation Sandbox's core requirements are feasible prerequisites to evaluate the feasibility of each step in the Business Model Development Strategy? (Refer to Chapter 4 and 5 in the main document)						
5.3 To what extent do you agree that by testing each step/component of the Business Model Development Strategy for viability as it gets designed, the whole business model risk will be reduced? (Refer to Chapter 4 and 5 in the main document)						

Appendix B

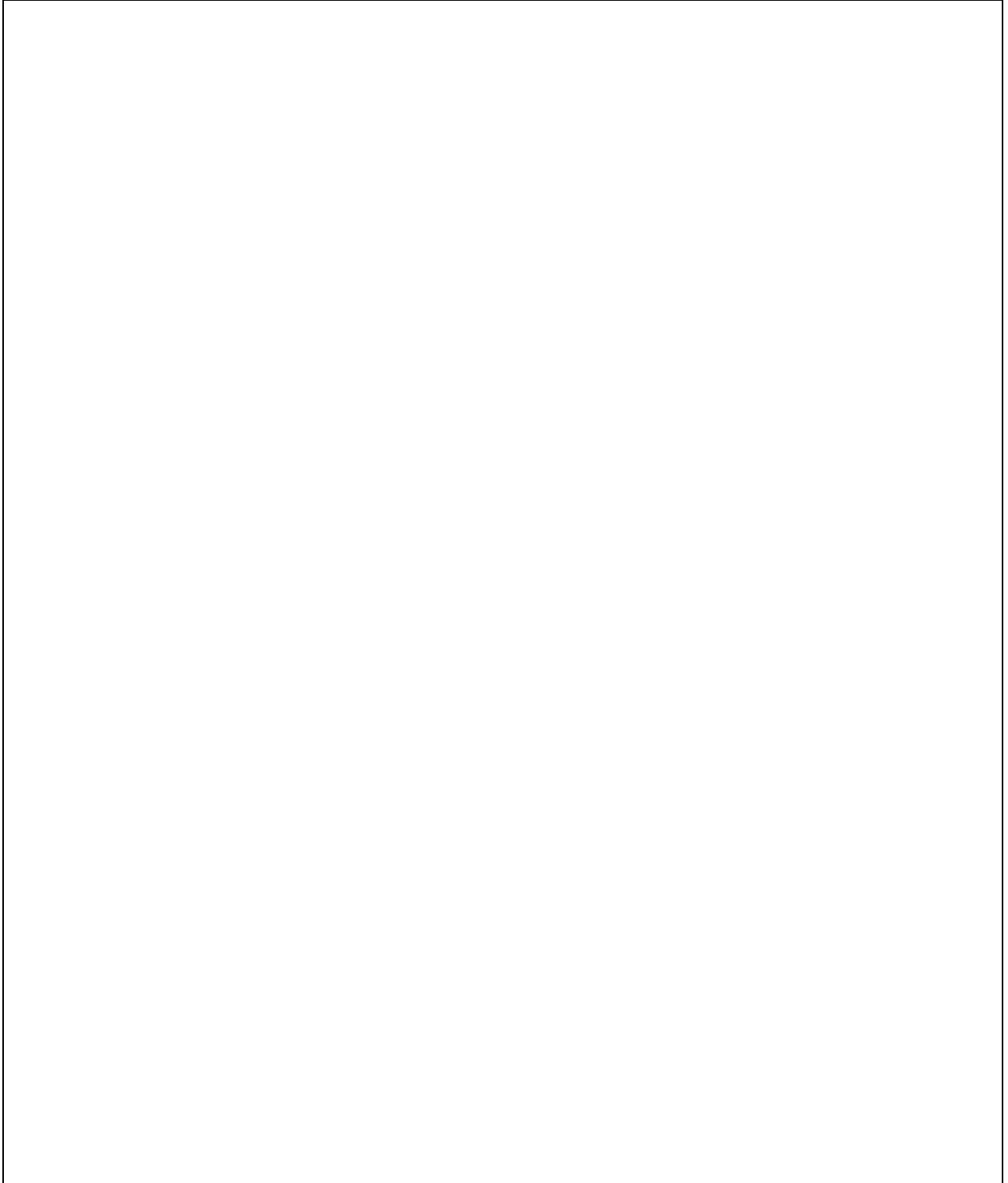
6. General Question

6.1 To what extent do you agree that the Business Model Development Strategy can assist an organisation to fulfill the core requirements of the BoP and target them successfully?

6.2 From your professional point of view, please comment on how applicable and relevant the Business Model Development Strategy is for organisations who want to target the BoP.

7. Further comments

Appendix B



Thank you for your time!

Appendix C: Question Ratings

Appendix C

Expert Analysis Rating

The following table shows the ratings interviewees gave each question. Appendix D shows their motivations

The Questions that got scores below three are marked in red. The interpretations and conclusions are given in Chapter 8.

Questions	Dr. Eric Lutters	Graham Lee	Servaas de Kock	Prof. Niek du Preez	Van der Spuy Brink	Average
1.1	5	4	5	5	5	4.80
1.2	4	5	5	5	5	4.80
1.3	5	4	5	4	5	4.60
1.4	Yes	Yes	Yes	Yes	Yes	Yes
2.1	2	5	5	3	4	3.80
2.2	4	5	5	3	5	4.40
2.3	N/A	5	5	5	5	5.00
2.4	5	5	5	4	5	4.80
2.5	5	5	5	5	4	4.80
3.1	5	3	5	5	3	4.20
3.2	5	4	5	5	5	4.80
4.1	5	4	5	3	5	4.40
4.2	5	4	5	4	5	4.60
4.3	5	N/A	5	3	5	4.50
4.4	5	3	3	5	5	4.20
4.5	Yes	Yes	Yes	Yes	Yes	Yes
4.6	3	4	5	4	5	4.20
4.7	5	5	5	N/A	5	5.00
4.8	4	5	4	N/A	5	4.50
5.1	4	4	5	4	5	4.40
5.2						-
5.3	2	N/A	5	4	5	4.00

As can be seen from the table above, none of the average ratings of each question was below three. The lowest average was 3.80. This difference in opinion for this question was over the necessity of Sustainable Development and is discussed in more detail in Chapter 8.

Appendix D: Summary of the Feedback

Appendix D

A summary of the feedback/motivations from the interviewees.

The table below presents a summary of the feedback/motivations the interviewees gave in response to the questions in the survey (Appendix B). The ratings and feedback/motivations were analysed and the full validation conclusion can be found in Chapter 8.

	Questions	Dr. Eric Lutters	Graham Lee	Servaas de Kock	Prof.Niek du Preez	Van der Spuy Brink
1.1	To what extent do you agree that organisations need to reexamine widely accepted orthodoxies about strategy, business practice and market research when they want to target the BoP?	(5) Disruptive change in attitude is required. Therefore nuanced adaption of working methods will not suffice.	(5) Agree that it is important that BoP are seriously considered. It is true that many organisations that previously ignored this market are now paying attention.	(5) This is a very unique market, but with individuals that form that.	(5) [Maybe substitute reexamine with challenge]	(5) It is a reality of life that the vast majority of people are poor. Making a difference to them and to the company can and must lead to greatness.
1.2	To what extent do you agree that organisations have to deliver both value as well as low-costs to the BoP to be successful?	(4) Suitable cost is the relative ability to acquire a product. The value added has to be in line with that. Value added should be the main driver for buying behaviour.	(5) Value is an even more important driver than cost	(5) People buy "benefits" and "value" when they transact.	5	(5) If no value or low cost, the BOP will move on to another supplier
1.3	To what extent do you agree that an organisation who wants to target the BoP has to rethink and innovate their business model?	(5) Business Model is the translation between market and strategy. Therefore if market changes, the business model has to change	(4) To the extent that value, simplicity and accessibility are not already important focal points of the model	(5) BoP is a very unique and holistic process.	4	(5) Radically; standard strategic models simply do not fit the BOP approach

Appendix D

	Questions	Dr. Eric Lutters	Graham Lee	Servaas de Kock	Prof.Niek du Preez	Van der Spuy Brink
1.4	Do you think the BoP can be a feasible market to target if their core requirements are fulfilled (Refer to Chapter 3.2 in the main document)?	(Yes) From an abstract viewpoint: The model can target any section of the pyramid, and can therefore target the BoP.	Certainly	(Yes) it can be, but not an easy market as some people wish to believe. "They are Streetwise!"	(Yes)	(Yes) I know it can work, yet to deploy must be a huge challenge. If we learn from numerous small operators in townships, it shows that it can work.
2.1	To what extent do you agree that organisations make flawed assumptions about the BoP?	(2) Assumptions are the second step. Problems will be more in the first step: recognising that the BoP could be a market	(5) This has been a serious problem in the past and a compelling reason why this market is under-served	(5) Most organisations do that because they do not understand this market.	(3) Some succeed, some do not	(4) We all live in our comfortable protected world and have no idea of BOP conditions. That will spill over to our thinking of "what is good for them" and will be wrong
2.2	To what extent do you agree with the main reasons why organisations don't/can't successfully target the BoP population?	(4) For European companies: Loss of brand identity, brand image, company image would also be important.	5	(5) It is not because of "could not" but because of don't know how to?	(3) Again an acute generalisation	(5) The main reasons may differ from country to country. In South Africa the "hard to reach" is perhaps the greatest hurdle
2.3	To what extent do you agree with the constraints that exist at the BoP?	Not Applicable - Dr Lutters is from the Netherlands where no BoP exist, hence it is difficult for him to assess.	5	(5) In any market there will always be constraints, but it is how you overcome that.	5	(5) Fully agree. In SA distant locations are a major hurdle. A legacy of the Group Areas Act to move them to Kayalitha, Atlantis..
2.4	To what extent to you agree with the core requirements (4As) that must be fulfilled in the BoP population?	(5) Like the approach because it's not about detail and completeness thereof, it's more about "dimensions".	(5) Very true. We use different words to capture our core focus, but the intent is the same.	(5) Agree totally	(4) Not exclusively, 80/20 or variants [There might be more]	(5) Fully agree. Acceptability perhaps the major one.

Appendix D

	Questions	Dr. Eric Lutters	Graham Lee	Servaas de Kock	Prof.Niek du Preez	Van der Spuy Brink
2.5	To what extent to you agree that the BoP is a market that is not targeted efficiently?	5	5	(5) Agree totally	5	(4) I see little of it happen in practice, yet in townships (black not coloured) there is a buzz of entrepreneurship.
3.1	To what extent to you agree that Sustainable Development is an essential part of targeting the BoP?	(5) 'If you do something, why not do it right'. So actually sustainable = rational	(3) From a personal perspective I think that sustainable development is important. However it must be noted that this issue currently does not seem to have much resonance with the BoP market. Good value in the short term is their primary focus.	(5) It is a pre-condition	(5) In context [The Triple Bottom Line is becoming very important]	(3) Sustainability can be a foggy politically correct statement, whereas a clear profit motive within good corporate governance fulfill this role better.
3.2	To what an extent do you agree with the three Goals an organisation must pursue when targeting the BoP: Profit, Social equity (by making products/services equally available to all people) and ensuring the environment isn't harmed?	(5) Profit: vouches for sustainability of the company. 'idealism won't work in the long run'. Equity: if no attention to that, you will discriminate. Environment (see 3.1)	(4) Certainly this is true for long-term success.	(5) It is part of the worldwide thought process and link-up with the 3P's - Triple Bottom Line: Profit, Planet, People	(5) For the 2010 course. [Profit, social equity and environmental quality will be a prerequisite for any organisation]	(5) Getting products (e.g. energy) that saves money and protects would be the ultimate.

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	Questions	Dr. Eric Lutters	Graham Lee	Servaas de Kock	Prof.Niek du Preez	Van der Spuy Brink
4.1	To what extent do you agree that the following building blocks of Osterwalder and Pigneur's business model fall under Utility: Customer, Value Proposition, Channels, and Customer Interface?	5	(4) Useful framework	(5) It also link in a way with the value chain analysis and Balanced Scorecard	(3) Make sense - how much will it depend on specifics implementation and teamwork	(5) Getting products (e.g. energy) that saves money and protects would be the ultimate.
4.2	To what extent do you agree that the following building blocks of Osterwalder and Pigneur's business model fall under Cost: Key Activities, Key Resources, Key Partnerships and Cost Structures?	5	4	(5) Agree, it is in a way the "cost, benefit" analysis in a new way.	4	(5) Also makes sense
4.3	To what extent do you agree with the structure of the Business Model Development Strategy?	Window of Opportunity', 'Required profit', 'Dependency instead of 'Sequence', Iteration	N/A	(5) Totally agree because if the BoP can work on its own it cannot be a BO(Blue Ocean)	3	5
4.4	Do you think that the BoP can be a possible blue ocean?	5 ++	(3) Depends very much on the industry. 5 year s ago this would have been true for financial service. Now this is becoming a more important part of many companies' business strategies.	(3) The strategy/model to penetrate it [BoP] can be a BO [Blue Ocean] with a BOS [Blue Ocean Strategy], Strategy, tools and Model [can create the BO, not the BoP]	(5) Demand on industry product etc.	(5) BOP must be a blue ocean. I see no other way of going about it than to follow BO[blue ocean] principles and action steps.

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	Questions	Dr. Eric Lutters	Graham Lee	Servaas de Kock	Prof.Niek du Preez	Van der Spuy Brink
4.5	A business model that is designed to target the BoP must address Utility of the product/service first, and then the Price that the BoP can afford, and then they must innovate to reach their Target Cost to ensure they still make a profit . Do you agree with this statement? Any comments?	(Yes) Although I think the Opportunity Window in Utility has to have an implicit feed-forward to pricing	(Yes). Very important to understand that a cost-plus model will probably fail.	(Yes) I do agree. There must also be some "emotional transaction" and "emotional benefits" for the member in the BoP, otherwise they will not buy. Utility must be the driving force and trigger to purchase (See Maslow)	(Yes)	(Yes) It makes sense. Get the idea/underlying magic right, believe in it, only then make it work. Difficult to see it work otherwise.
4.6	To what extent do you agree that the Innovation Sandbox Process will help summarise and put the BoP in context to be able to come up with solutions to fulfill the requirements of the BoP?	(3) If Sandbox is a tool in the model , it's great. If it were to become a fixed, inherent part thereof, you'll limit yourself too much.	(4) A useful approach to clarifying ideas	(5) It gives a method and process to follow. Companies or people look/seek processes, methods and recipes.	(4) Content dictates [The content will dictate the solution]	(5) Any metaphor is hugely helpful. I would even go as far as to built physically and start playing in it!
4.7	To what extent do you agree that an organisation will achieve greater success if they first immerse themselves in the BoP to gain insight into their needs and lifestyles, before designing the business model?	5 +++ User centred design is paramount everywhere.	(5) Essential	(5) Agree, very much so. To get buy-in and acceptability	-	(5) See my earlier answer. Anything else is make believe and day dreaming. Send the top management to stay for a weekend in a shanty town and drink in a shebeen!

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	Questions	Dr. Eric Lutters	Graham Lee	Servaas de Kock	Prof.Niek du Preez	Van der Spuy Brink
4.8	To what extent do you agree with the approach (Customer: Six Steps) the organisation must take to immerse themselves in the BoP?	(4) Primary research following secondary research has the risk of arrogance. (Primary Research should not be about validation, trying to validate the secondary research)	(5) All very necessary. Approach likely to be iterative rather than linear. Any assumptions must be stated and explicitly tested.	(4) Agree - also look at the behaviour profile of the customer.	-	(5) I look at it against the standard Johnson & Scholes model: What is going on internally, externally, list options, make a choice, implement. Steps 1-6 fits this, yet the actual roll out is not in it.
5.1	To what extent do you agree that the core requirements (4A's), as well as utility, price and cost, are feasible tests to minimize risk of failure?	(4) Implicitly Yes. Explicit proof of complete testing is impossible.	(4) To the extent that to not consider them will probably lead to failure.	(5) Very much so, because risk is a "price return" model.	4	5
5.2	To what extent do you agree that the Blue Ocean Strategy's strategic sequence combined with the Innovation Sandbox's core requirements are feasible prerequisites to evaluate the feasibility of each step in the Business Model Development Strategy?	This question was removed from the survey. See Chapter 8 for more details.				

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5.3	To what extent do you agree that by testing each step/component of the Business Model Development Strategy for viability as it gets designed, the whole business model risk will be reduced?	(2) Testing the parts (independently) is not enough to test the whole, but it is required to be able to test the whole.	N/A	(5) It addresses the basis of a input-output/"cost benefit" model	(4) Sum of Parts <> Sum of whole.	(5) In a strategic process (e.g. Johnson and Scholes) logic helps and is actually critical in the successful creation of it.
6.1	To what extent do you agree that the Business Model Development Strategy can assist an organisation to fulfill the core requirements of the BoP and target them successfully?	The Model is : Structured, transparent, dependency orientated, allows flexibility in use, is not necessarily deterministic. It is clear, understandable, inherently shows reproducibility. Gives sum of parts, where parts are clear => YES	Certainly this is a very useful framework that applies a structured approach to the consideration of all of the most important issues.	This is at least 100% better than nothing. Currently there is no alternative so this strategy model and process will contribute and assist organisations. It is a benchmark.	Forms a good structure from [where] to start from: a) Comprehensiveness b) Aggregate [Triple Bottom Line can be reached] c) Also provide a base platform for further engagement.	Fully: see the answers above
6.2	From your professional point of view, please comment on how applicable and relevant the Business Model Development Strategy is for organisations who want to target the BoP.	It's applicable for any sub-section of the overall market structure. With the right input it can be more tailored to a specific sub-section, for example BoP. I think, the model is a great contribution to many existing design models.	This model is very relevant, and is definitely applicable to Capitec's business. It covers all major areas of concern that we addressed in developing our business model, and structures them in a thoughtful way.	Very practical and relevant as I can follow the process and building blocks (recipe) to use in any organisation that wants to penetrate the BoP.	Good starting point. To be refined in a specific application/industry/region/culture/value chain	Yes, as above

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7	Further comments	Impressive work!	The document is one that shows insight into both the essentials of defining a business model, as well as the importance and relevance of a previously ignored segment of the market.	This is a very scientific study and of very high standard!! It follows a very unique thinking and design principles that is also practical and implement in the real world. A very fine balance between theory, process and application as well as a method one can use in practice. This study will and can be the foundation/ basis for future development work and further studies. Congratulations!!!	Proof of pudding is in the eating.	This a great stuff Tanye and screams for wider application and awareness.